

DCSCM 2.0

PROJECT NAME: HR355M V3

PCB MATERIAL: IT-180A+RTF

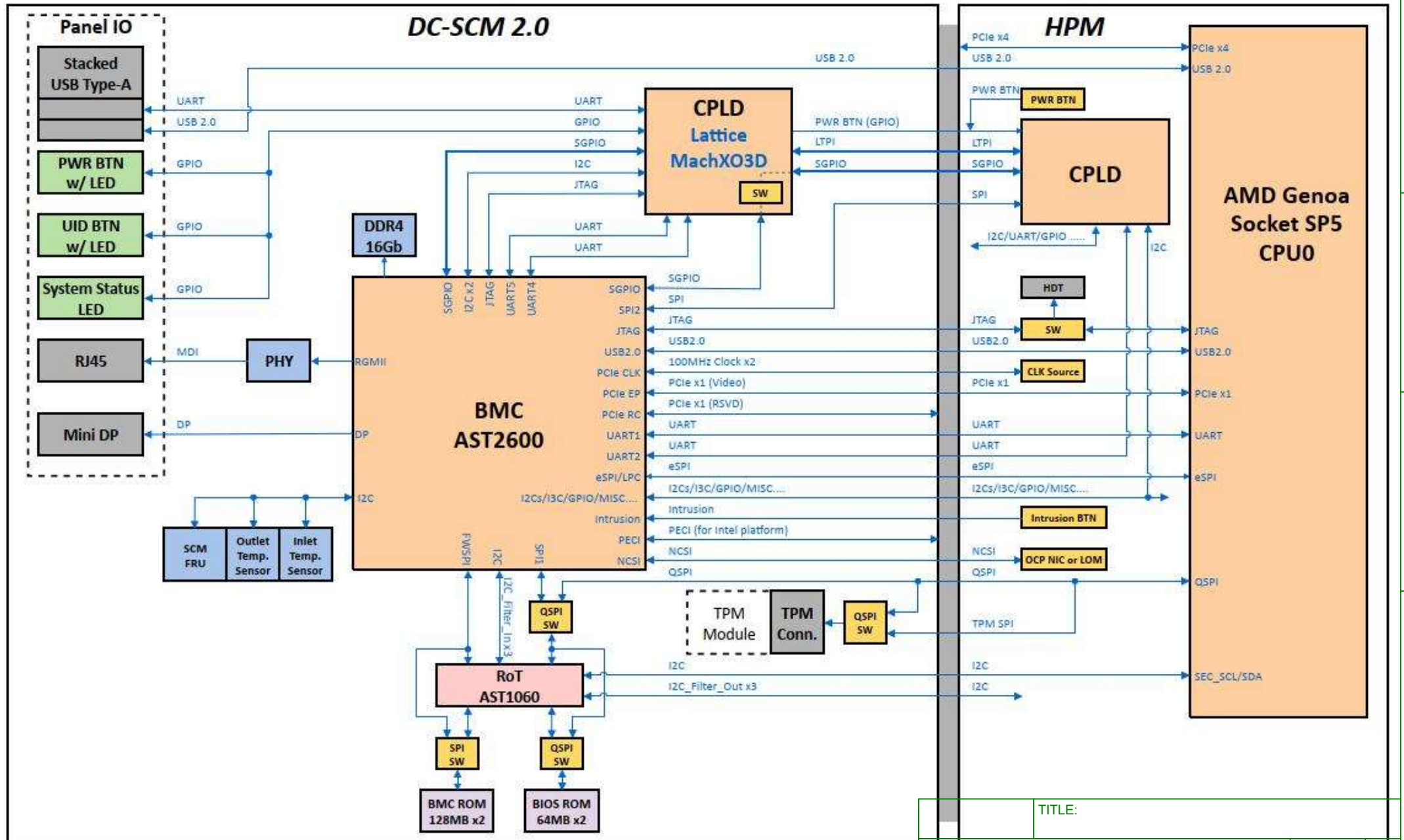
PCB SIZE: 122.2MM X 85.8MM

PCB LAYER: 10L

PCB THICKNESS: 62.8 MIL +-8%

			TITLE: SCM BOARD	
Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 1 OF 90	

[illegible]



Project Name: OF_DCSCM2.0

REV: EVT2

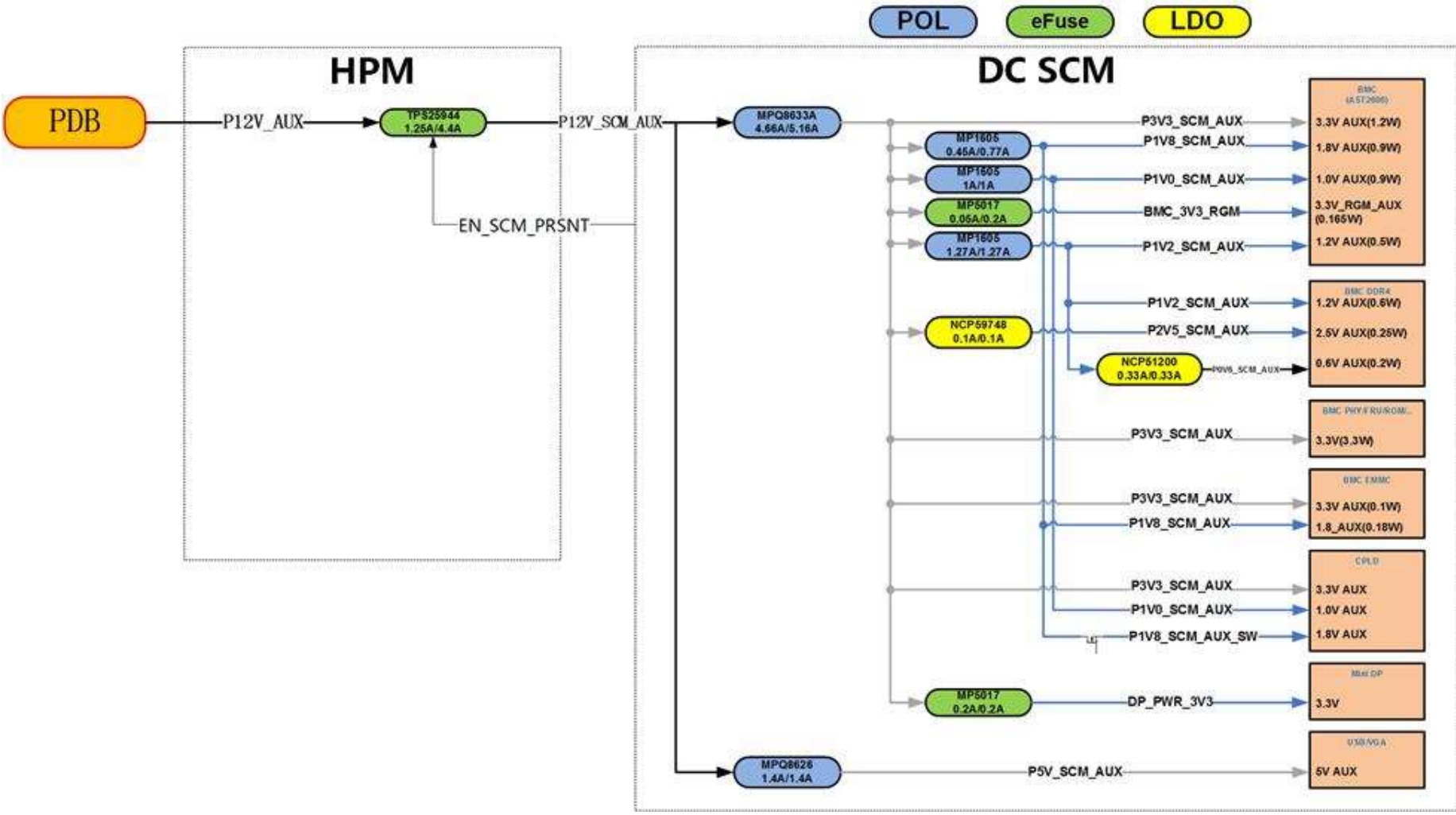
SIZE: B

ENGINEER: <ENGINEER>

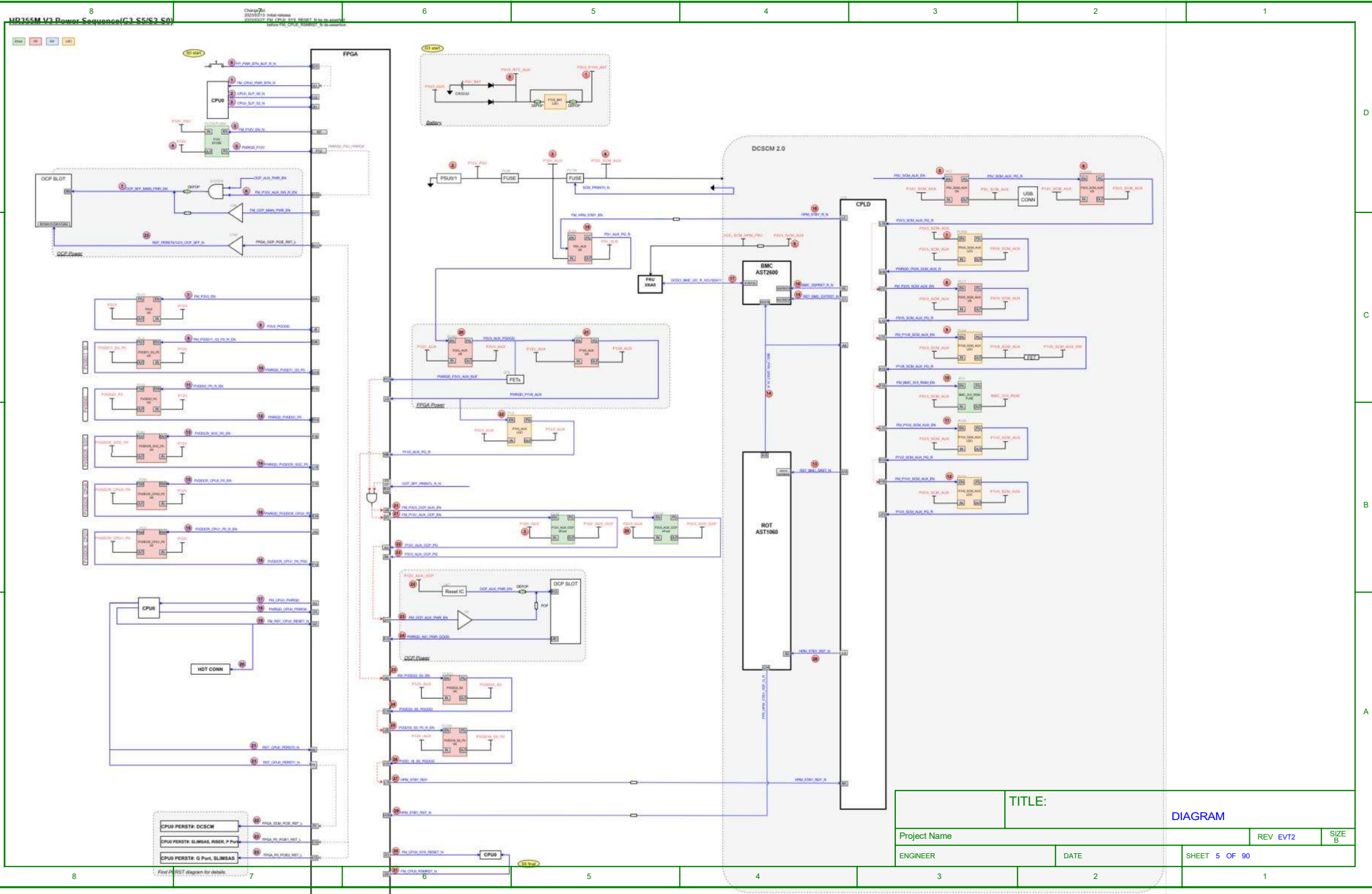
DATE: <DATE>

SHEET: 3 OF 90

TITLE:

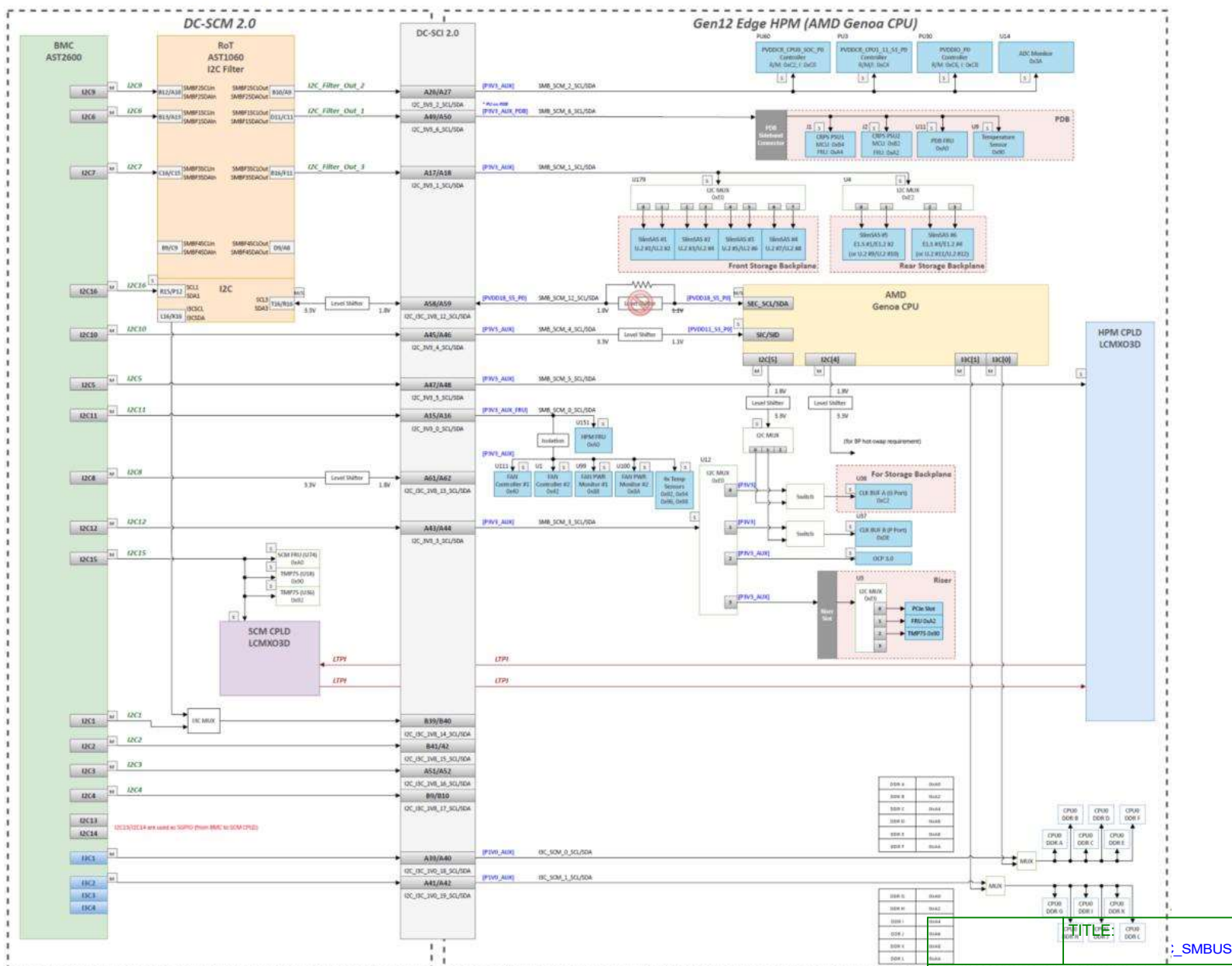


TITLE:		POWER DISTRIBUTION		
Project Name	CF_DCSCM2.0	REV	EVT2	SIZE
ENGINEER	<ENGINEER>	DATE	<DATE>	SHEET 4 OF 90

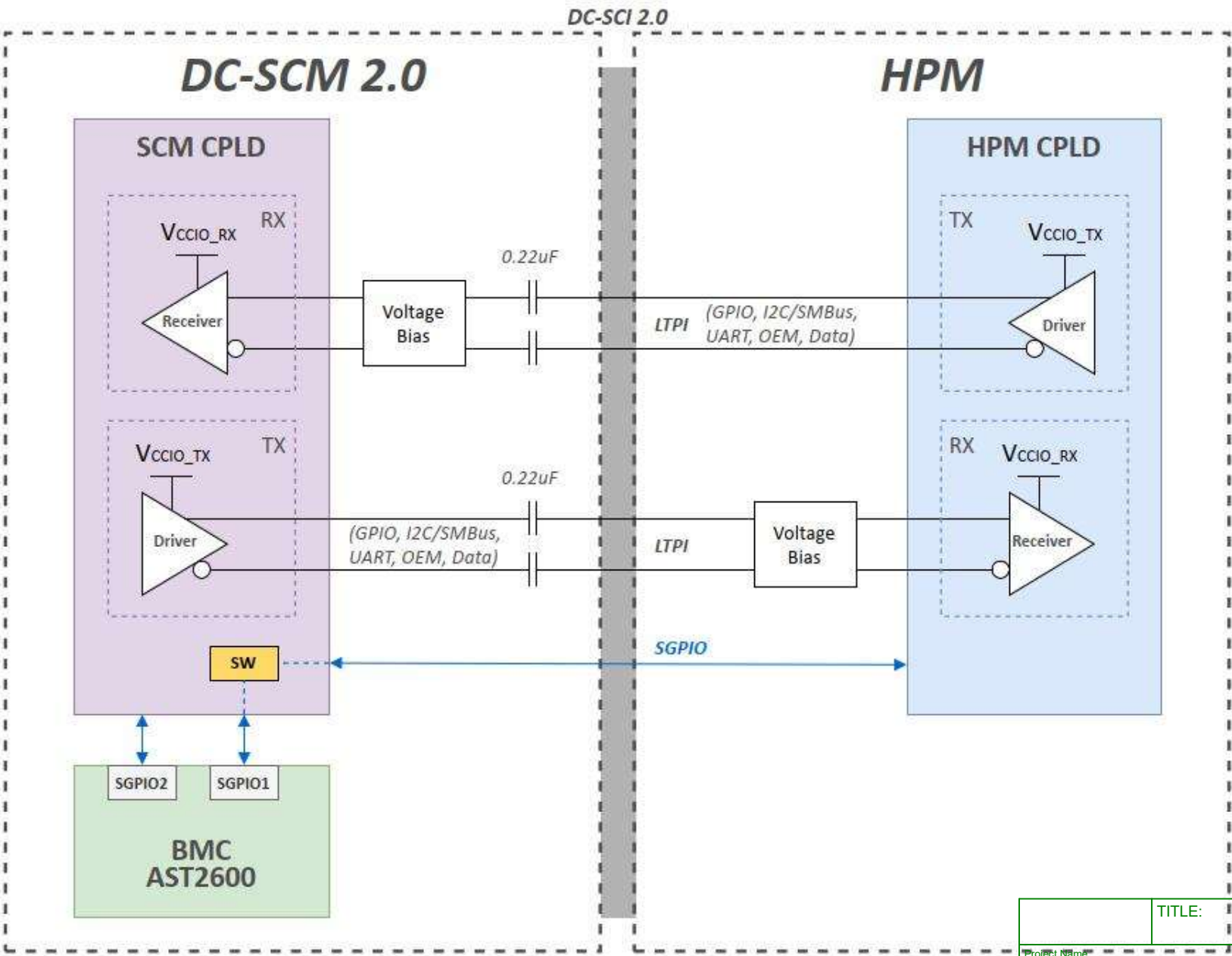




- Need add PU resistors.



TITLE: CPU0-D001 CPU0-D002 CPU0-D003 : SMBUS



TITLE:		SGPIO BLOCK DIAGRAM	
Project Name	REV	EVT2	SIZE
ENGINEER <ENGINEER>	DATE <DATE>	SHEET 8 OF 90	

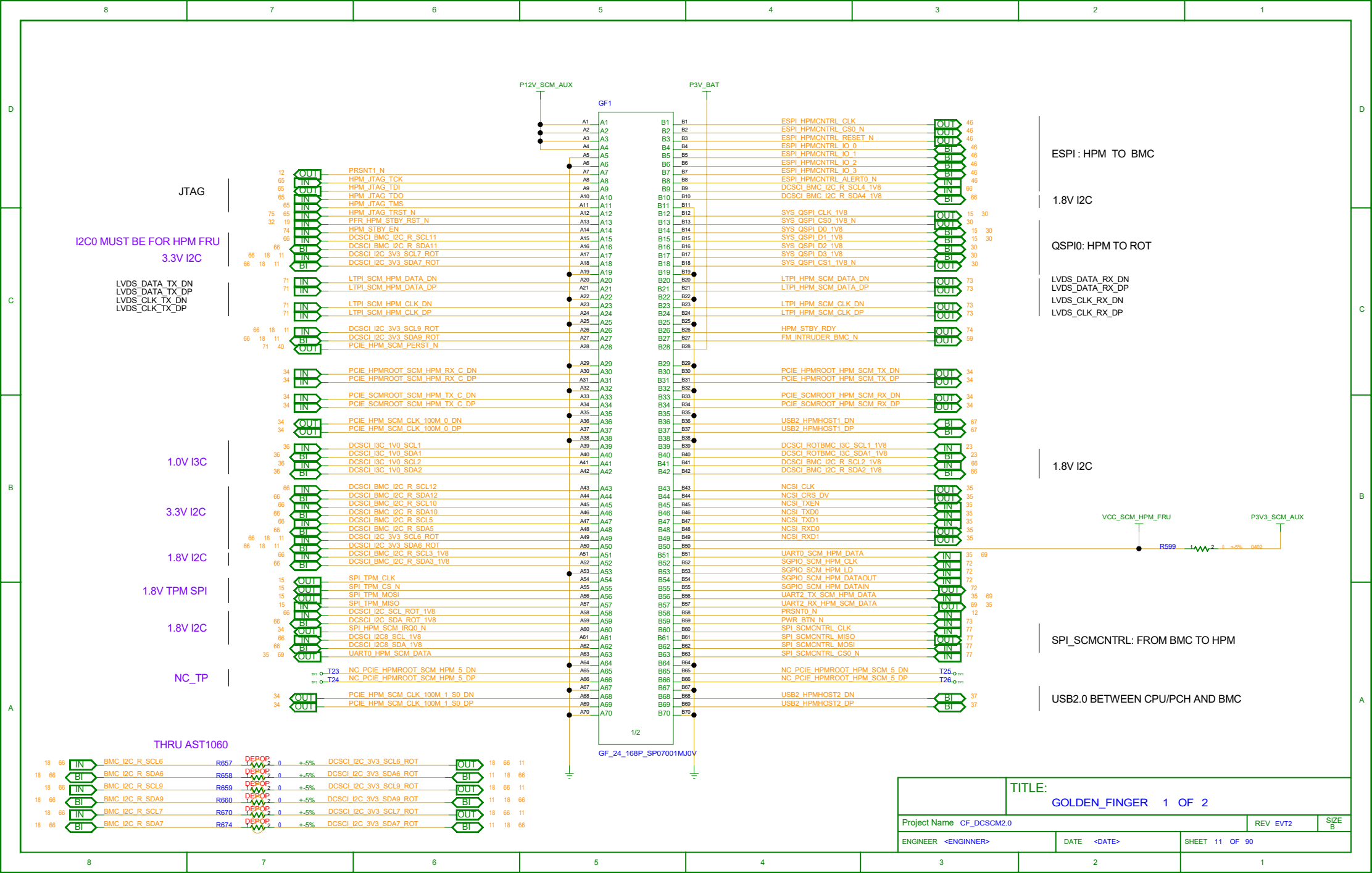
CR-9 : @SPU_LIB.CF_DCSCM(SCH_1):PAGE9

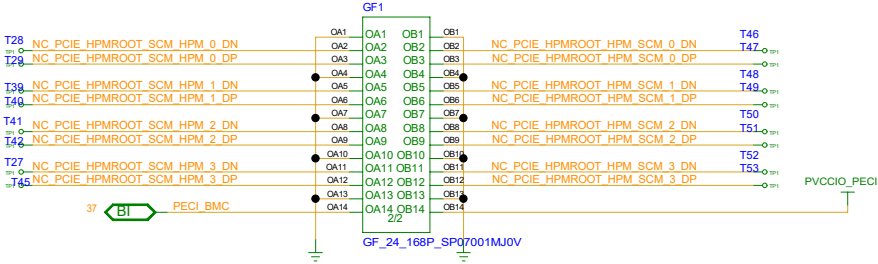
8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
<table><tr><th colspan="2">Stackup Structure</th><th colspan="6">Material Parameters</th><th colspan="2">Single - Ended Impedance</th><th colspan="6">Differential Impedance</th></tr><tr><th rowspan="2">Layer</th><th rowspan="2">Type</th><th rowspan="2">Thickness (mil)</th><th rowspan="2">Copper Type</th><th rowspan="2">Copper foil</th><th rowspan="2">Thickness (mil)</th><th rowspan="2">PP (PC%)</th><th rowspan="2">Dk (1 GHz)</th><th rowspan="2">Df (1 GHz)</th><th colspan="2">50 Ohm ±10%</th><th colspan="2">85 Ohm ±10%</th><th colspan="3">49 (avg) dB/inch</th><th colspan="3">100 Ohm ±10%</th></tr><tr><th>Width (mil)</th><th>Sim Z</th><th>Width (mil)</th><th>Spacing (mil)</th><th>Sim Z</th><th>6 GHz</th><th>12 GHz</th><th>15 GHz</th><th>Width (mil)</th><th>Spacing (mil)</th><th>Sim Z</th></tr><tr><td></td><td>solder mask</td><td>0.50</td><td></td><td></td><td></td><td></td><td>3.70</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1</td><td>TOP</td><td>1.90</td><td>0.5oz+plating</td><td>H.T.E</td><td></td><td></td><td></td><td></td><td>4.30</td><td>50.97</td><td>4.80</td><td>6.40</td><td>85.16</td><td></td><td></td><td>4.30</td><td>14.00</td><td>97.16</td></tr><tr><td></td><td>prepreg</td><td>2.70</td><td></td><td></td><td></td><td></td><td>3.50</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>GND2</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>Core</td><td>3.00</td><td></td><td></td><td></td><td></td><td>3.50</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>SIG3</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td>4.00</td><td>49.54</td><td>4.50</td><td>6.40</td><td>85.87</td><td></td><td></td><td>4.00</td><td>15.00</td><td>97.70</td></tr><tr><td></td><td>prepreg</td><td>12.00</td><td></td><td></td><td></td><td></td><td>3.70</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td>GND4</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>Core</td><td>3.00</td><td></td><td></td><td></td><td></td><td>3.70</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td>SIG5</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td>3.60</td><td>48.13</td><td>4.20</td><td>6.40</td><td>85.22</td><td></td><td></td><td>3.60</td><td>14.00</td><td>97.21</td></tr><tr><td></td><td>prepreg</td><td>6.00</td><td></td><td></td><td></td><td></td><td>3.60</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td>GND6</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>Core</td><td>3.00</td><td></td><td></td><td></td><td></td><td>3.70</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td>INVERT</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>prepreg</td><td>12.00</td><td></td><td></td><td></td><td></td><td>3.70</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td>SIG8</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td>4.00</td><td>49.54</td><td>4.50</td><td>6.40</td><td>85.87</td><td></td><td></td><td>4.00</td><td>15.00</td><td>97.70</td></tr><tr><td></td><td>Core</td><td>3.00</td><td></td><td></td><td></td><td></td><td>3.50</td><td>0.0100</td><td></td><td></td><td></td><td></td><td>0.0</td><td>0.0</td><td>0.0</td><td></td><td></td></tr><tr><td>9</td><td>GND9</td><td>1.20</td><td>1oz</td><td>RTF</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>prepreg</td><td>2.70</td><td></td><td></td><td></td><td></td><td>3.50</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td>BOTTOM</td><td>1.90</td><td>0.5oz+plating</td><td>H.T.E</td><td></td><td></td><td></td><td></td><td>4.30</td><td>50.97</td><td>4.80</td><td>6.40</td><td>85.16</td><td></td><td></td><td>4.30</td><td>14.00</td><td>97.16</td></tr><tr><td></td><td>solder mask</td><td>0.50</td><td></td><td></td><td></td><td></td><td>3.70</td><td>0.0100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2">Board thickness:</td><td>61.80</td><td>1.57</td><td></td><td>0.00</td><td>0.00</td><td></td><td></td><td>DDR,Misc I/O, Single Ended Clocks</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="9"></td><td colspan="3">PCIe, SATA, USB, DIFF CLOCK</td><td colspan="3"></td><td colspan="3">MDI, Ethernet</td></tr></table>								Stackup Structure		Material Parameters						Single - Ended Impedance		Differential Impedance						Layer	Type	Thickness (mil)	Copper Type	Copper foil	Thickness (mil)	PP (PC%)	Dk (1 GHz)	Df (1 GHz)	50 Ohm ±10%		85 Ohm ±10%		49 (avg) dB/inch			100 Ohm ±10%			Width (mil)	Sim Z	Width (mil)	Spacing (mil)	Sim Z	6 GHz	12 GHz	15 GHz	Width (mil)	Spacing (mil)	Sim Z		solder mask	0.50					3.70	0.0100										1	TOP	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16		prepreg	2.70					3.50	0.0100										2	GND2	1.20	1oz	RTF															Core	3.00					3.50	0.0100										3	SIG3	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70		prepreg	12.00					3.70	0.0100										4	GND4	1.20	1oz	RTF															Core	3.00					3.70	0.0100										5	SIG5	1.20	1oz	RTF					3.60	48.13	4.20	6.40	85.22			3.60	14.00	97.21		prepreg	6.00					3.60	0.0100										6	GND6	1.20	1oz	RTF															Core	3.00					3.70	0.0100										7	INVERT	1.20	1oz	RTF															prepreg	12.00					3.70	0.0100										8	SIG8	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70		Core	3.00					3.50	0.0100					0.0	0.0	0.0			9	GND9	1.20	1oz	RTF															prepreg	2.70					3.50	0.0100										10	BOTTOM	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16		solder mask	0.50					3.70	0.0100										Board thickness:		61.80	1.57		0.00	0.00			DDR,Misc I/O, Single Ended Clocks																		PCIe, SATA, USB, DIFF CLOCK						MDI, Ethernet		
Stackup Structure		Material Parameters						Single - Ended Impedance		Differential Impedance																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Layer	Type	Thickness (mil)	Copper Type	Copper foil	Thickness (mil)	PP (PC%)	Dk (1 GHz)	Df (1 GHz)	50 Ohm ±10%		85 Ohm ±10%		49 (avg) dB/inch			100 Ohm ±10%																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
									Width (mil)	Sim Z	Width (mil)	Spacing (mil)	Sim Z	6 GHz	12 GHz	15 GHz	Width (mil)	Spacing (mil)	Sim Z																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	solder mask	0.50					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
1	TOP	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	prepreg	2.70					3.50	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
2	GND2	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Core	3.00					3.50	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
3	SIG3	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	prepreg	12.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
4	GND4	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Core	3.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
5	SIG5	1.20	1oz	RTF					3.60	48.13	4.20	6.40	85.22			3.60	14.00	97.21																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	prepreg	6.00					3.60	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
6	GND6	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Core	3.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
7	INVERT	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	prepreg	12.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
8	SIG8	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Core	3.00					3.50	0.0100					0.0	0.0	0.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
9	GND9	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	prepreg	2.70					3.50	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
10	BOTTOM	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	solder mask	0.50					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Board thickness:		61.80	1.57		0.00	0.00			DDR,Misc I/O, Single Ended Clocks																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
									PCIe, SATA, USB, DIFF CLOCK						MDI, Ethernet																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
<table><tr><td colspan="12"></td><td colspan="4">TITLE: STACK UP</td></tr><tr><td colspan="12">Project Name CF_DCSCM2.0</td><td colspan="2">REV EVT2</td><td colspan="2">SIZE B</td></tr><tr><td colspan="6">ENGINEER <ENGINEER></td><td colspan="4">DATE <DATE></td><td colspan="6">SHEET 9 OF 90</td></tr></table>																				TITLE: STACK UP				Project Name CF_DCSCM2.0												REV EVT2		SIZE B		ENGINEER <ENGINEER>						DATE <DATE>				SHEET 9 OF 90																																																																																																																																																																																																																																																																																																																																																																																																																																						
												TITLE: STACK UP																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Project Name CF_DCSCM2.0												REV EVT2		SIZE B																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
ENGINEER <ENGINEER>						DATE <DATE>				SHEET 9 OF 90																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

8		7		6		5		4		3		2		1																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
<table border="1"> <thead> <tr> <th colspan="2">Stackup Structure</th> <th colspan="7">Material Parameters</th> <th colspan="2">Single-Ended Impedance</th> <th colspan="7">Differential Impedance</th> </tr> <tr> <th rowspan="2">Layer</th> <th rowspan="2">Type</th> <th rowspan="2">Thickness (mil)</th> <th rowspan="2">Copper Type</th> <th rowspan="2">Copper foil</th> <th rowspan="2">Thickness (mil)</th> <th rowspan="2">PP (PC%)</th> <th rowspan="2">Dk (1 GHz)</th> <th rowspan="2">Df (1 GHz)</th> <th colspan="2">50 Ohm ±10%</th> <th colspan="3">85 Ohm ±10%</th> <th colspan="3">49 (low dB/inch)</th> <th colspan="3">100 Ohm ±10%</th> </tr> <tr> <th>Width (mil)</th> <th>Sim Z</th> <th>Width (mil)</th> <th>Spacing (mil)</th> <th>Sim Z</th> <th>6 GHz</th> <th>12 GHz</th> <th>15 GHz</th> <th>Width (mil)</th> <th>Spacing (mil)</th> <th>Sim Z</th> </tr> </thead> <tbody> <tr> <td></td> <td>solder mask</td> <td>0.50</td> <td></td> <td></td> <td></td> <td></td> <td>3.70</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>TOP</td> <td>1.90</td> <td>0.5oz+plating</td> <td>H.T.E</td> <td></td> <td></td> <td></td> <td></td> <td>4.30</td> <td>50.97</td> <td>4.80</td> <td>6.40</td> <td>85.16</td> <td></td> <td></td> <td>4.30</td> <td>14.00</td> <td>97.16</td> </tr> <tr> <td></td> <td>prepreg</td> <td>2.70</td> <td></td> <td></td> <td></td> <td></td> <td>3.50</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>GND2</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Core</td> <td>3.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.50</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>SIG3</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td>4.00</td> <td>49.54</td> <td>4.50</td> <td>6.40</td> <td>85.87</td> <td></td> <td></td> <td>4.00</td> <td>15.00</td> <td>97.70</td> </tr> <tr> <td></td> <td>prepreg</td> <td>12.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.70</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>GND4</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Core</td> <td>3.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.70</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>SIG5</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td>3.60</td> <td>48.13</td> <td>4.20</td> <td>6.40</td> <td>85.22</td> <td></td> <td></td> <td>3.60</td> <td>14.00</td> <td>97.21</td> </tr> <tr> <td></td> <td>prepreg</td> <td>6.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.60</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>GND6</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Core</td> <td>3.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.70</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>INVERT</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>prepreg</td> <td>12.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.70</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>SIG8</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td>4.00</td> <td>49.54</td> <td>4.50</td> <td>6.40</td> <td>85.87</td> <td></td> <td></td> <td>4.00</td> <td>15.00</td> <td>97.70</td> </tr> <tr> <td></td> <td>Core</td> <td>3.00</td> <td></td> <td></td> <td></td> <td></td> <td>3.50</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td></td> </tr> <tr> <td>9</td> <td>GND9</td> <td>1.20</td> <td>1oz</td> <td>RTF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>prepreg</td> <td>2.70</td> <td></td> <td></td> <td></td> <td></td> <td>3.50</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>BOTTOM</td> <td>1.90</td> <td>0.5oz+plating</td> <td>H.T.E</td> <td></td> <td></td> <td></td> <td></td> <td>4.30</td> <td>50.97</td> <td>4.80</td> <td>6.40</td> <td>85.16</td> <td></td> <td></td> <td>4.30</td> <td>14.00</td> <td>97.16</td> </tr> <tr> <td></td> <td>solder mask</td> <td>0.50</td> <td></td> <td></td> <td></td> <td></td> <td>3.70</td> <td>0.0100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Board thickness:</td> <td>61.80</td> <td>1.57</td> <td></td> <td>0.00</td> <td>0.00</td> <td></td> <td></td> <td>DDR,Misc I/O, Single Ended Clocks</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="9"></td> <td colspan="3">PCIe, SATA, USB, DIFF CLOCK</td> <td colspan="3"></td> <td colspan="3">MDI, Ethernet</td> </tr> </tbody> </table>																Stackup Structure		Material Parameters							Single-Ended Impedance		Differential Impedance							Layer	Type	Thickness (mil)	Copper Type	Copper foil	Thickness (mil)	PP (PC%)	Dk (1 GHz)	Df (1 GHz)	50 Ohm ±10%		85 Ohm ±10%			49 (low dB/inch)			100 Ohm ±10%			Width (mil)	Sim Z	Width (mil)	Spacing (mil)	Sim Z	6 GHz	12 GHz	15 GHz	Width (mil)	Spacing (mil)	Sim Z		solder mask	0.50					3.70	0.0100									1	TOP	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16		prepreg	2.70					3.50	0.0100									2	GND2	1.20	1oz	RTF														Core	3.00					3.50	0.0100									3	SIG3	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70		prepreg	12.00					3.70	0.0100									4	GND4	1.20	1oz	RTF														Core	3.00					3.70	0.0100									5	SIG5	1.20	1oz	RTF					3.60	48.13	4.20	6.40	85.22			3.60	14.00	97.21		prepreg	6.00					3.60	0.0100									6	GND6	1.20	1oz	RTF														Core	3.00					3.70	0.0100									7	INVERT	1.20	1oz	RTF														prepreg	12.00					3.70	0.0100									8	SIG8	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70		Core	3.00					3.50	0.0100					0.0	0.0	0.0		9	GND9	1.20	1oz	RTF														prepreg	2.70					3.50	0.0100									10	BOTTOM	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16		solder mask	0.50					3.70	0.0100									Board thickness:		61.80	1.57		0.00	0.00			DDR,Misc I/O, Single Ended Clocks																	PCIe, SATA, USB, DIFF CLOCK						MDI, Ethernet		
Stackup Structure		Material Parameters							Single-Ended Impedance		Differential Impedance																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Layer	Type	Thickness (mil)	Copper Type	Copper foil	Thickness (mil)	PP (PC%)	Dk (1 GHz)	Df (1 GHz)	50 Ohm ±10%		85 Ohm ±10%			49 (low dB/inch)			100 Ohm ±10%																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
									Width (mil)	Sim Z	Width (mil)	Spacing (mil)	Sim Z	6 GHz	12 GHz	15 GHz	Width (mil)	Spacing (mil)	Sim Z																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	solder mask	0.50					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1	TOP	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	prepreg	2.70					3.50	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
2	GND2	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Core	3.00					3.50	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
3	SIG3	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	prepreg	12.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
4	GND4	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Core	3.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
5	SIG5	1.20	1oz	RTF					3.60	48.13	4.20	6.40	85.22			3.60	14.00	97.21																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	prepreg	6.00					3.60	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
6	GND6	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Core	3.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
7	INVERT	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	prepreg	12.00					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
8	SIG8	1.20	1oz	RTF					4.00	49.54	4.50	6.40	85.87			4.00	15.00	97.70																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Core	3.00					3.50	0.0100					0.0	0.0	0.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
9	GND9	1.20	1oz	RTF																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	prepreg	2.70					3.50	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
10	BOTTOM	1.90	0.5oz+plating	H.T.E					4.30	50.97	4.80	6.40	85.16			4.30	14.00	97.16																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	solder mask	0.50					3.70	0.0100																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Board thickness:		61.80	1.57		0.00	0.00			DDR,Misc I/O, Single Ended Clocks																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
									PCIe, SATA, USB, DIFF CLOCK						MDI, Ethernet																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
<table border="1"> <tr> <td colspan="12"></td> <td colspan="4">TITLE: STACK UP</td> </tr> <tr> <td colspan="12">Project Name CF_DCSCM2.0</td> <td colspan="2">REV EVT2</td> <td colspan="2">SIZE B</td> </tr> <tr> <td colspan="8">ENGINEER <ENGINEER></td> <td colspan="4">DATE <DATE></td> <td colspan="4">SHEET 9 OF 90</td> </tr> </table>																												TITLE: STACK UP				Project Name CF_DCSCM2.0												REV EVT2		SIZE B		ENGINEER <ENGINEER>								DATE <DATE>				SHEET 9 OF 90																																																																																																																																																																																																																																																																																																																																																																																																																						
												TITLE: STACK UP																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Project Name CF_DCSCM2.0												REV EVT2		SIZE B																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
ENGINEER <ENGINEER>								DATE <DATE>				SHEET 9 OF 90																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

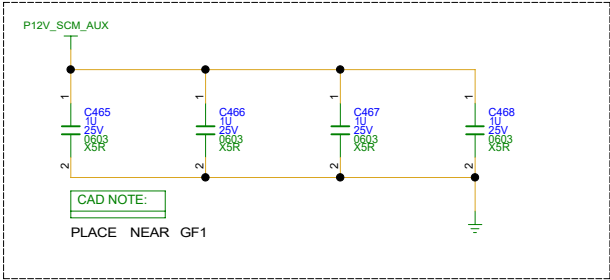
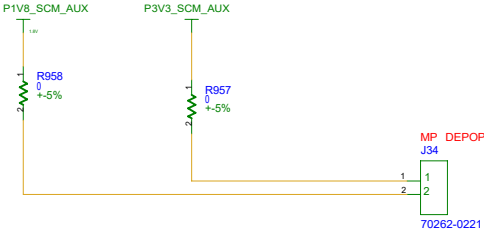
----GF TO HPM----

		TITLE: ----GF TO HPM----		
Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 10 OF 90	





CAD NOTE:
FOR DEBUG PURPOSE



TITLE:		GOLDEN_FINGER 2 OF 2	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET		12 OF 90	

8

7

6

5

4

3

2

1

EMPTY

TITLE:

EMPTY

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 13 OF 90

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

D

D

C

C

B

B

A

A

----TPM----

	TITLE: --TPM--			
Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 14 OF 90	

8

7

6

5

4

3

2

1

A



A

A

8

7

6

5

4

3

2

1

D

D

C

C

B

B

A

A

----ROT----

TITLE:

----ROT----

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 16 OF 90

8

7

6

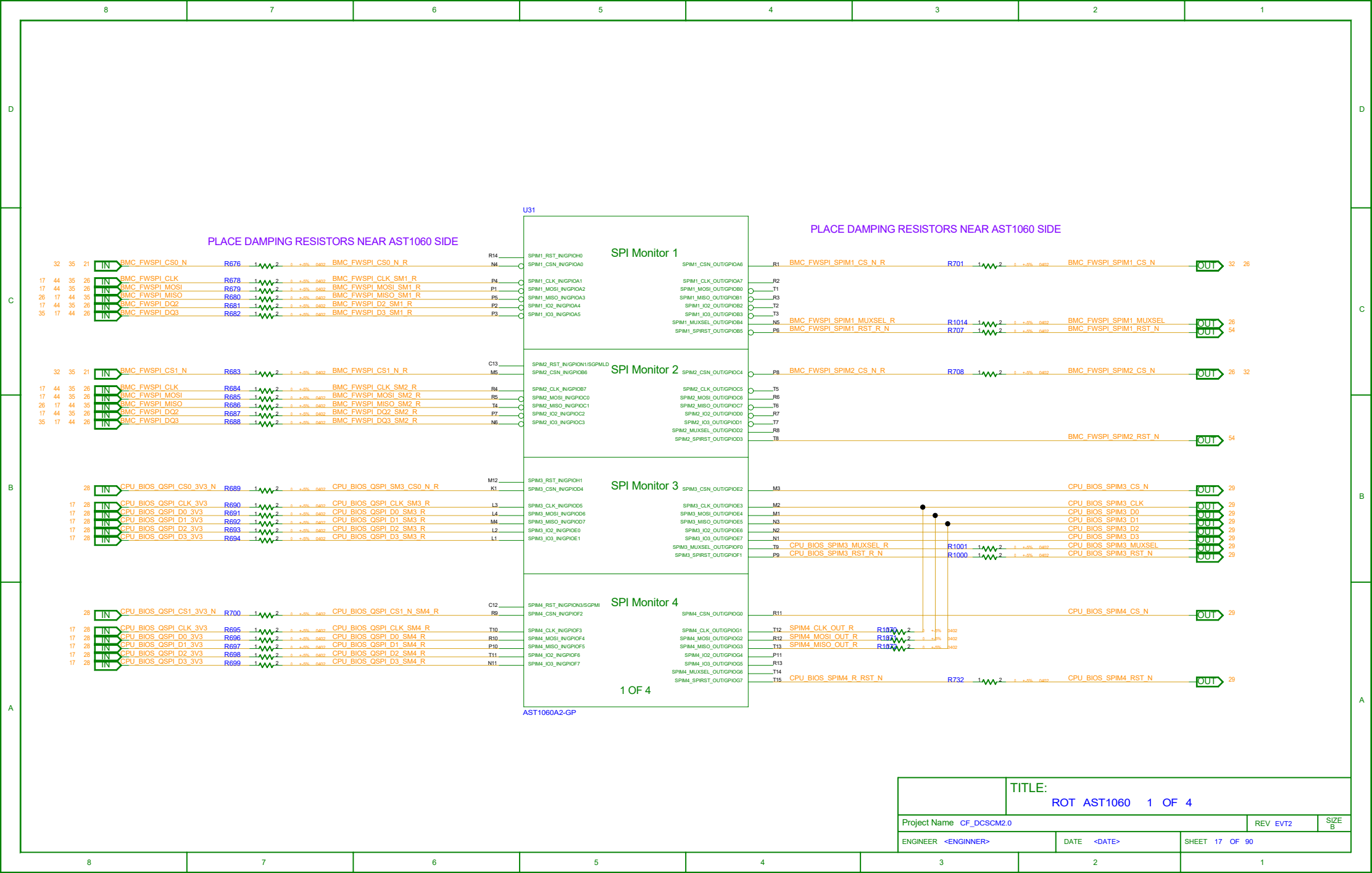
5

4

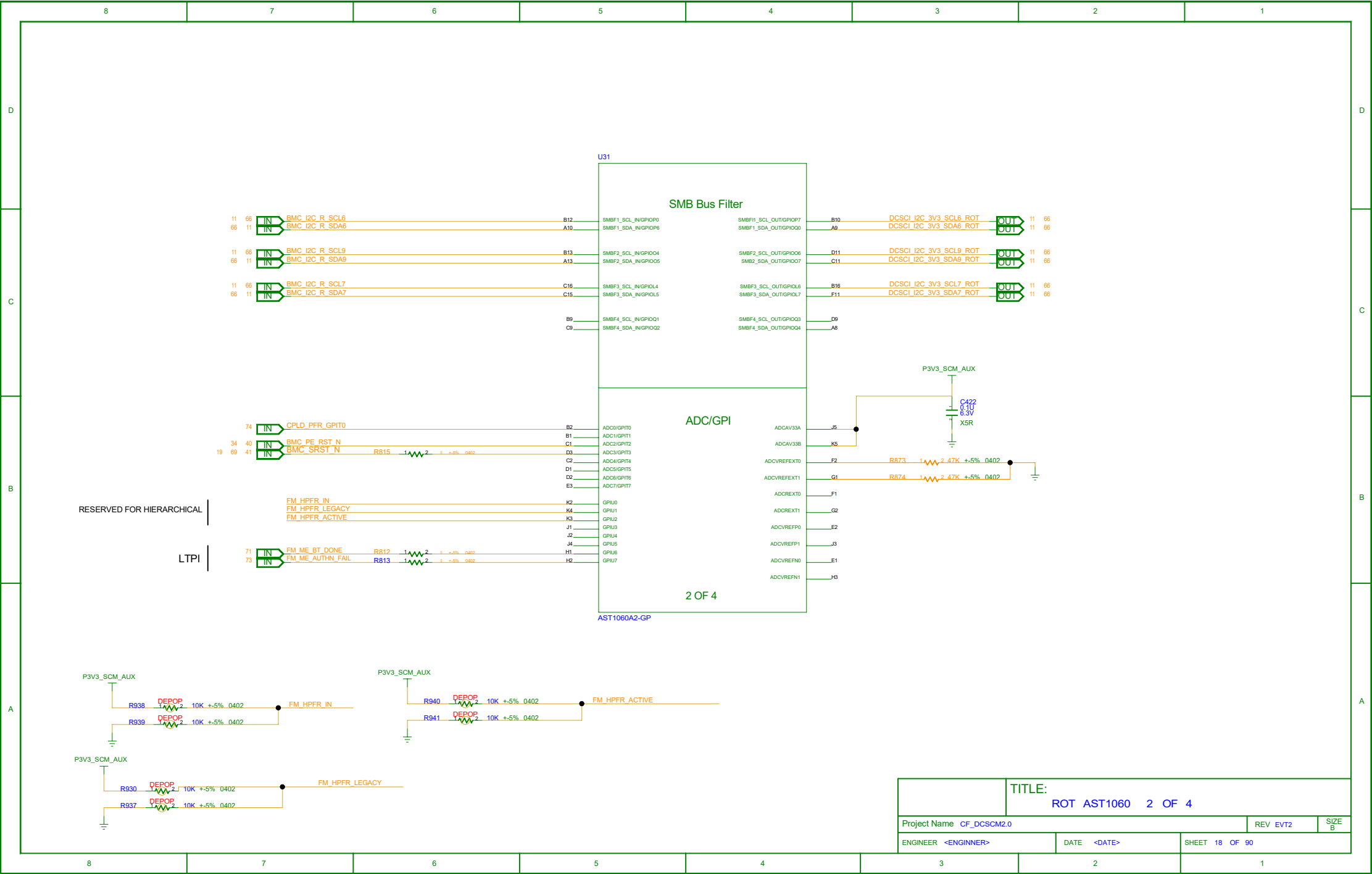
3

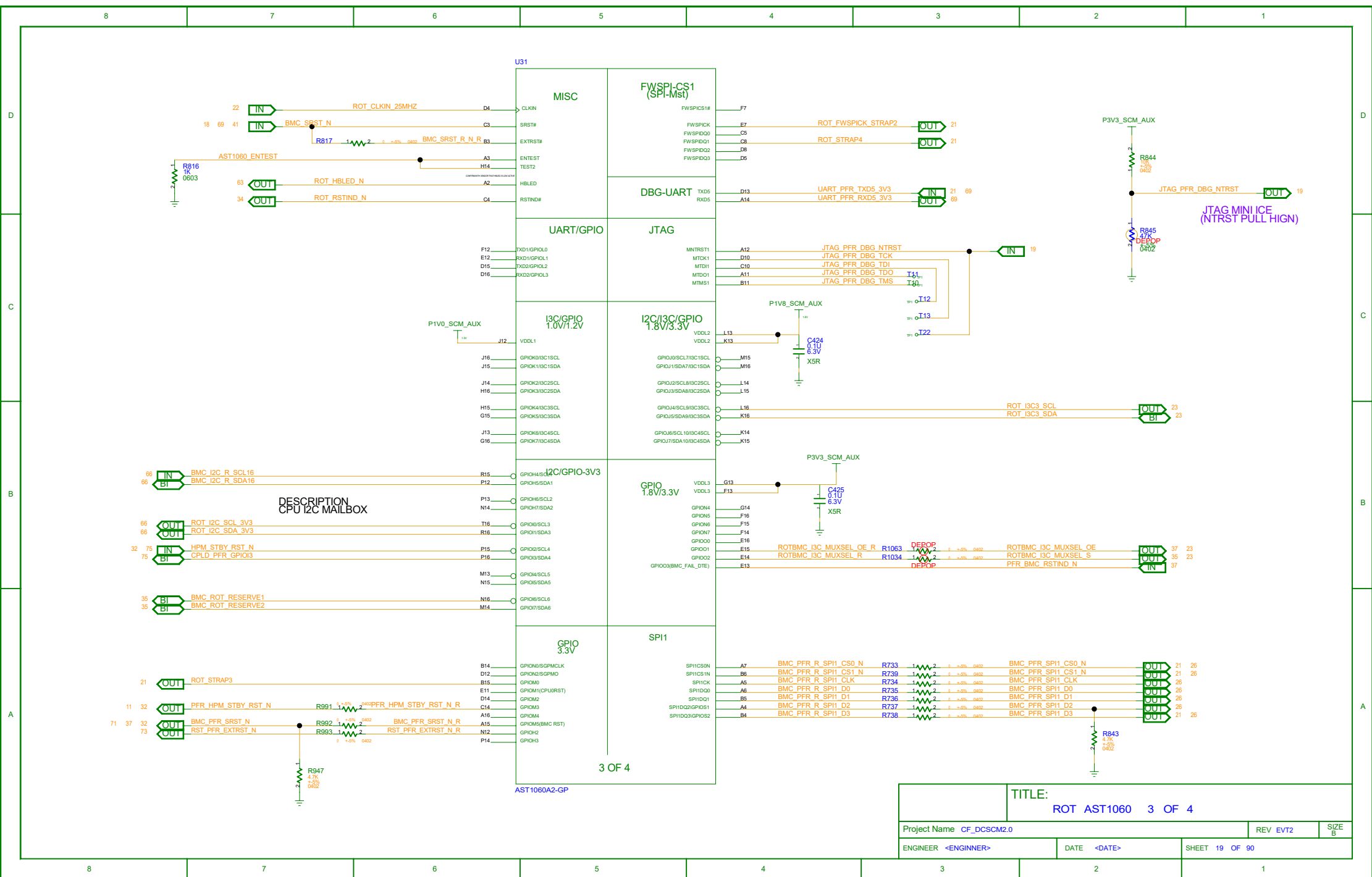
2

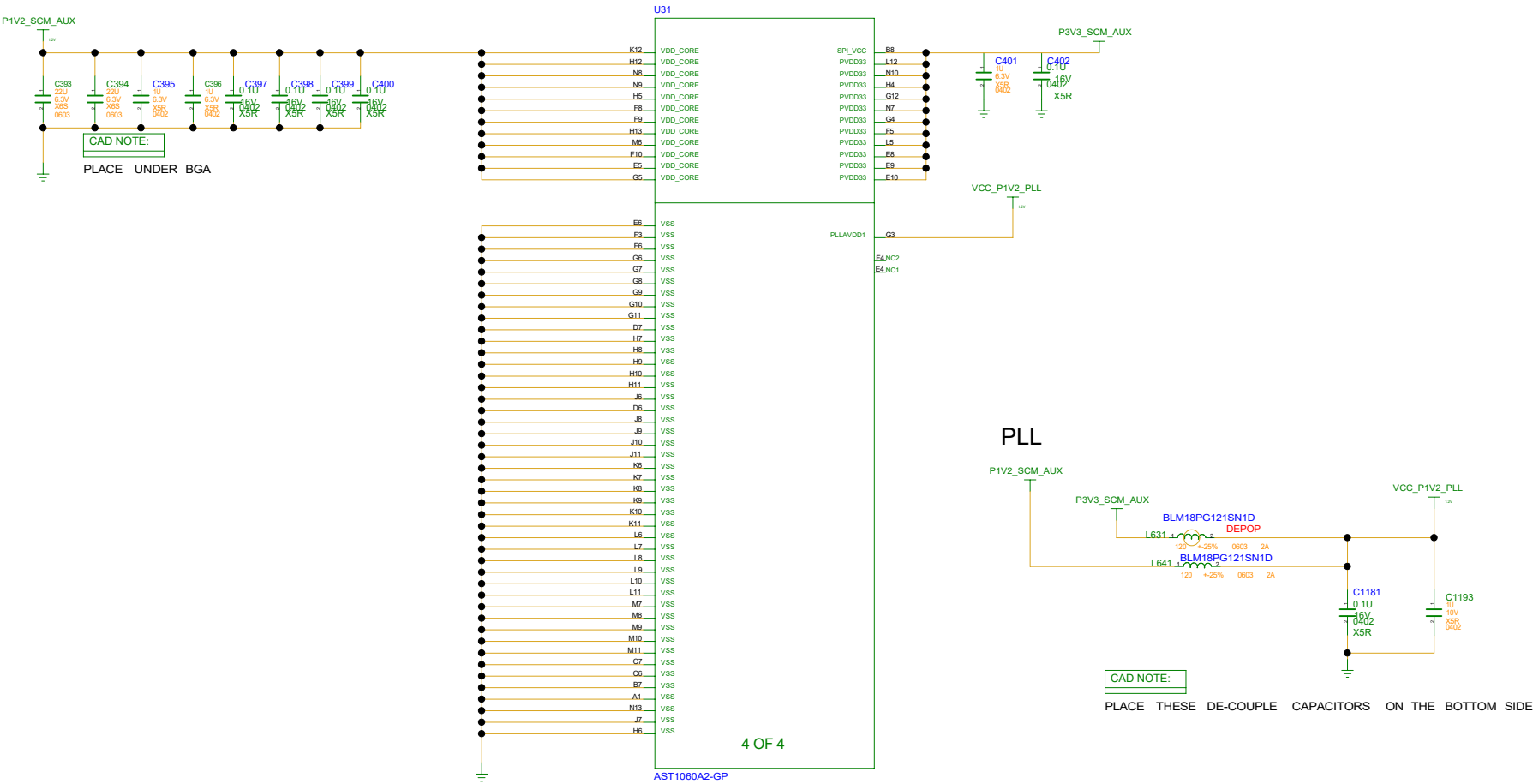
1



TITLE:		ROT AST1060 1 OF 4	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 17 OF 90

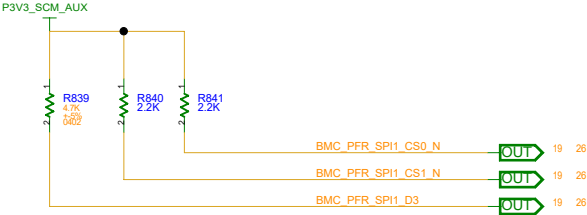
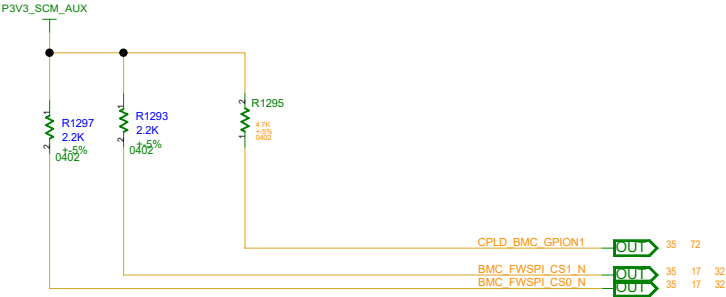
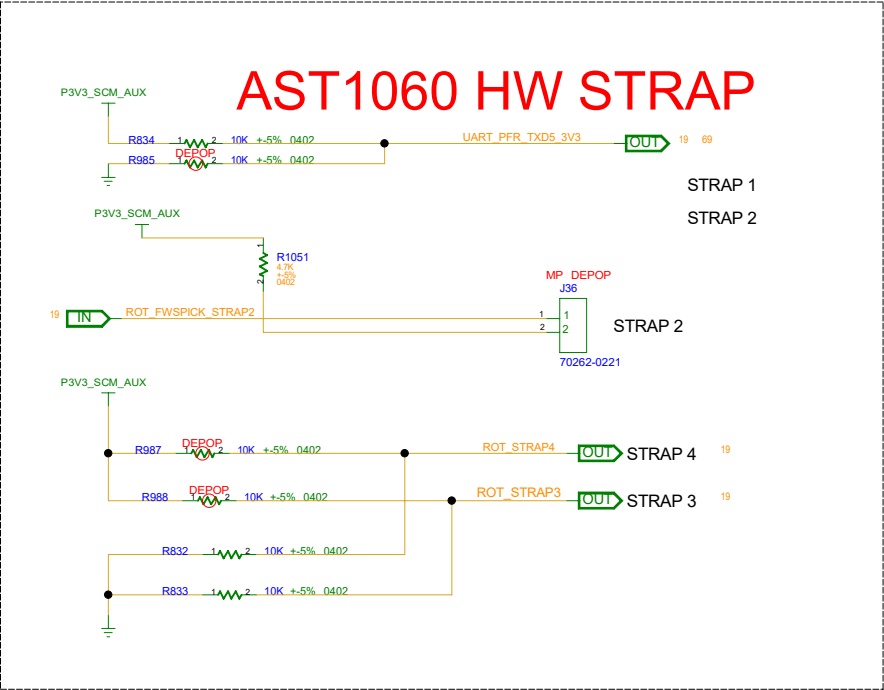






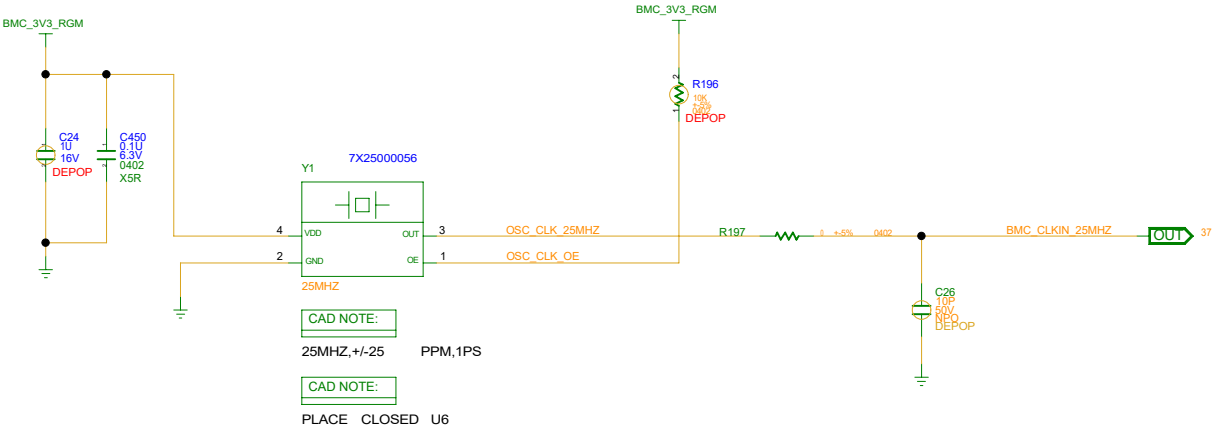
TITLE:		ROT AST1060 4 OF 4	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 20 OF 90

STRAP NUM	BALL NUM	BALL NAME	DESCRIPTION
1	D13	TXD5	DISABLE ARM CM4 CPU BOOT 0: ARM BOOT DISABLE 1: ARM BOOT ENABLE
2	E7	FWSPICK	ENABLE BOOT FROM UART5 0: BOOT FROM SPI ROM 1: BOOT FROM UART5
3	B15	GPIOM0	ENABLE SECURITY BOOT BY PIN STRAP 0: DISABLE SECURE BOOT 1: ENABLE SECURE BOOT
4	C8	FWSPIDQ1 (FWSPIMISO)	ENABLE LOW SECURE BOOT FUNCTION 0: DISABLE LOW SECURE BOOT 1: ENABLE LOW SECURE BOOT

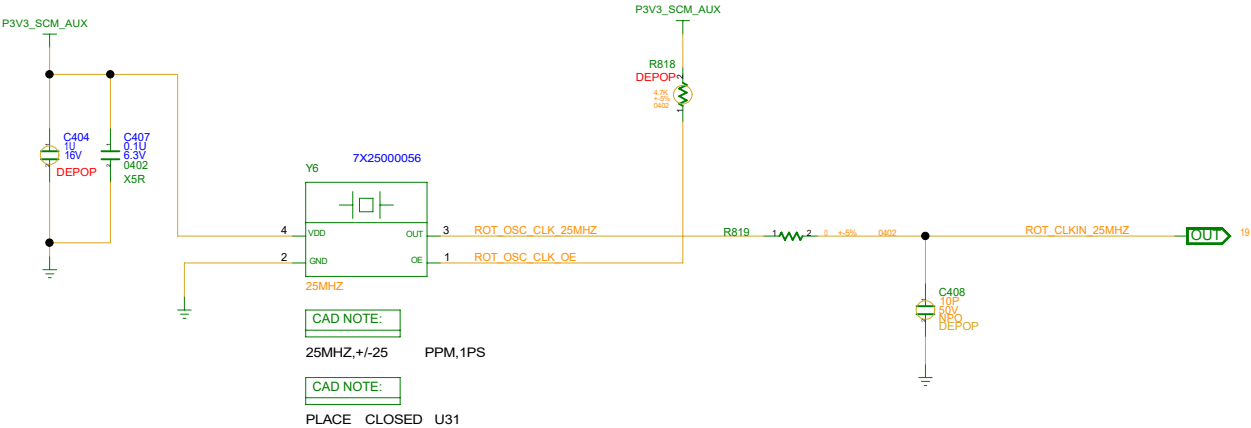


TITLE:		ROT SIDEBAND	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET		21	OF 90

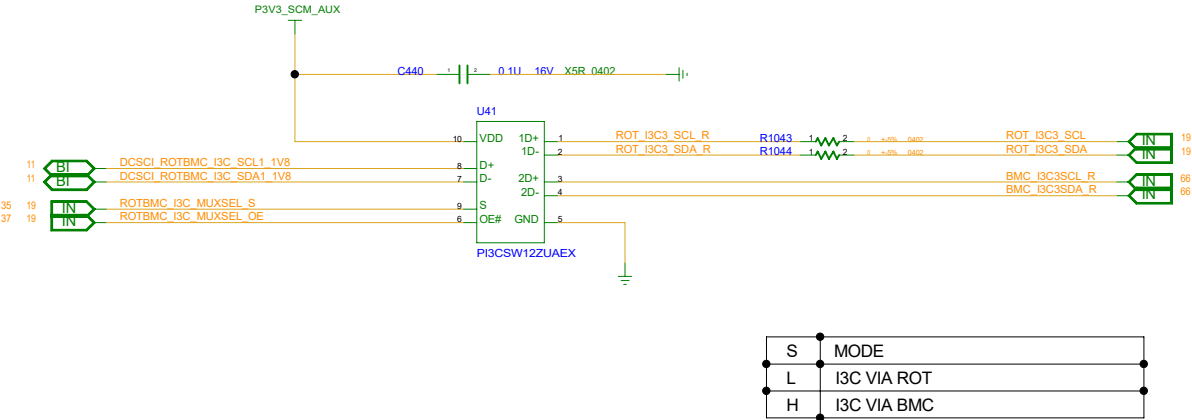
BMC CLOCK



ROT CLOCK



TITLE:		OSC_25M_CLOCK		
Project Name		CF_DCSCM2.0	REV	EVT2
ENGINEER		<ENGINEER>	DATE	<DATE>
		SHEET 22 OF 90		



TITLE:		I2C MUX	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET 23 OF 90		SIZE B	

8

7

6

5

4

3

2

1

D

D

C

C

B

B

A

A

EMPTY

		TITLE: Blank		
Project Name CF_DCSCM2.0				REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 24 OF 90	

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

EMPTY

TITLE:

Blank

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 25 OF 90

8

7

6

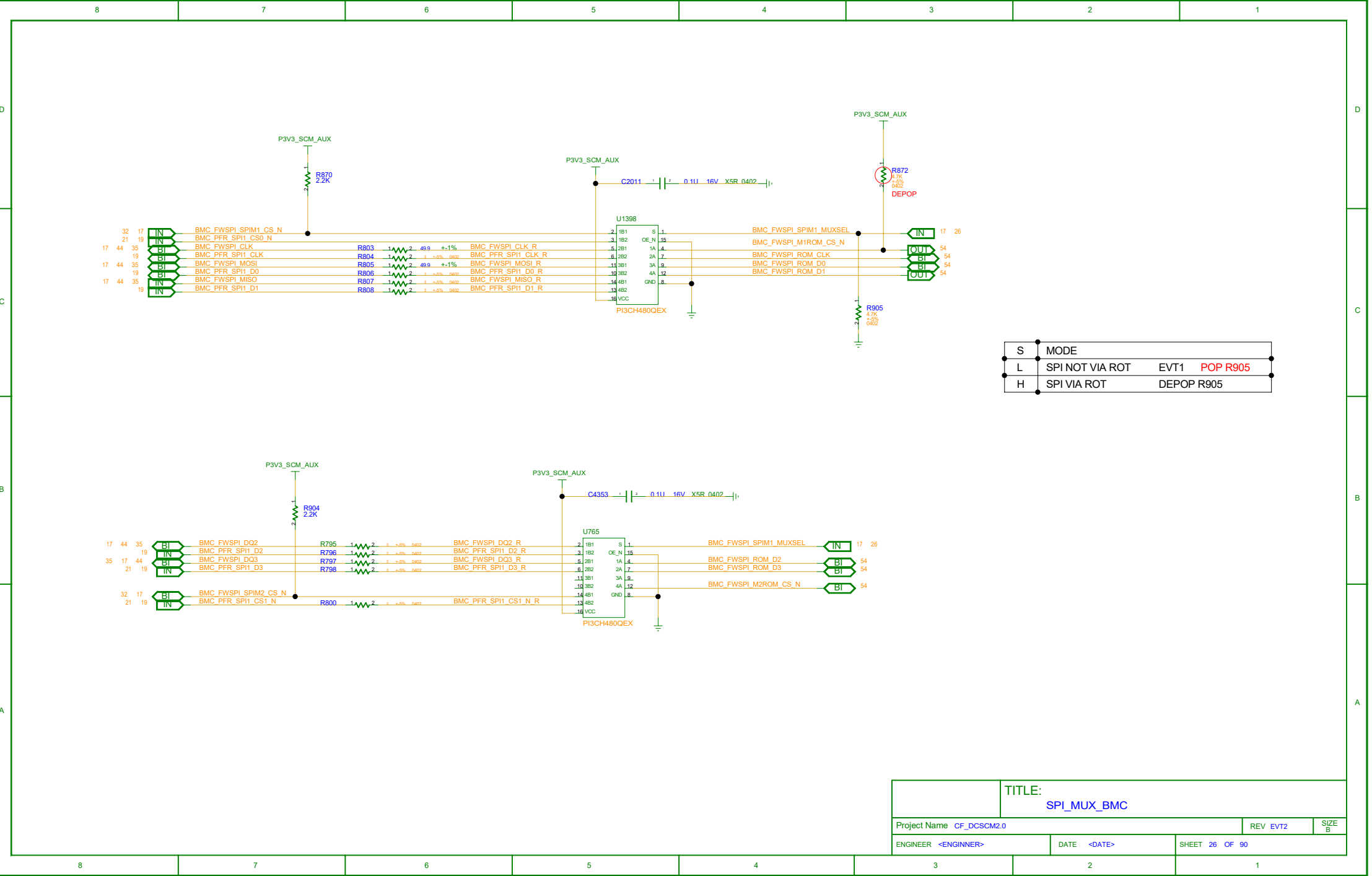
5

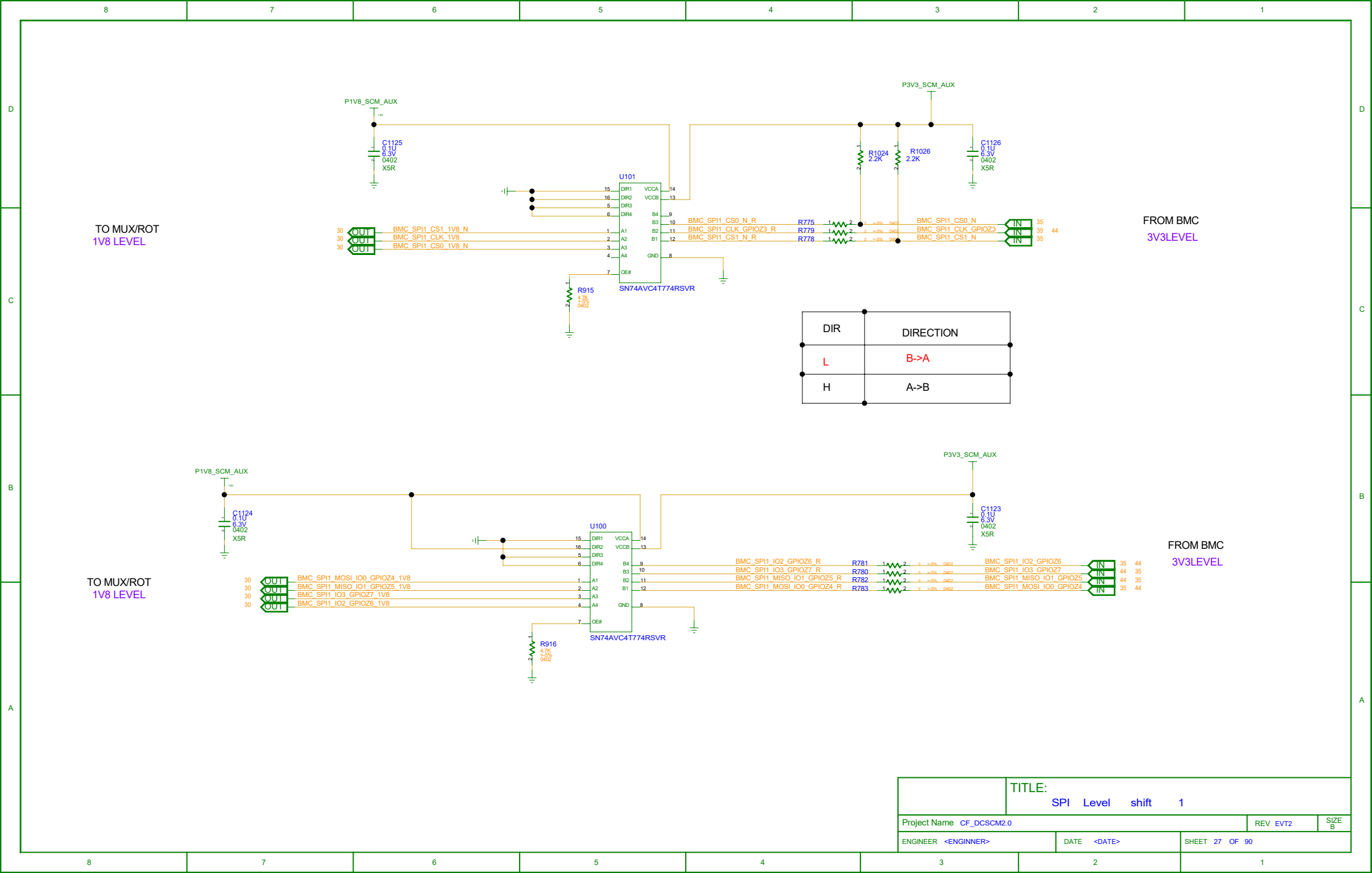
4

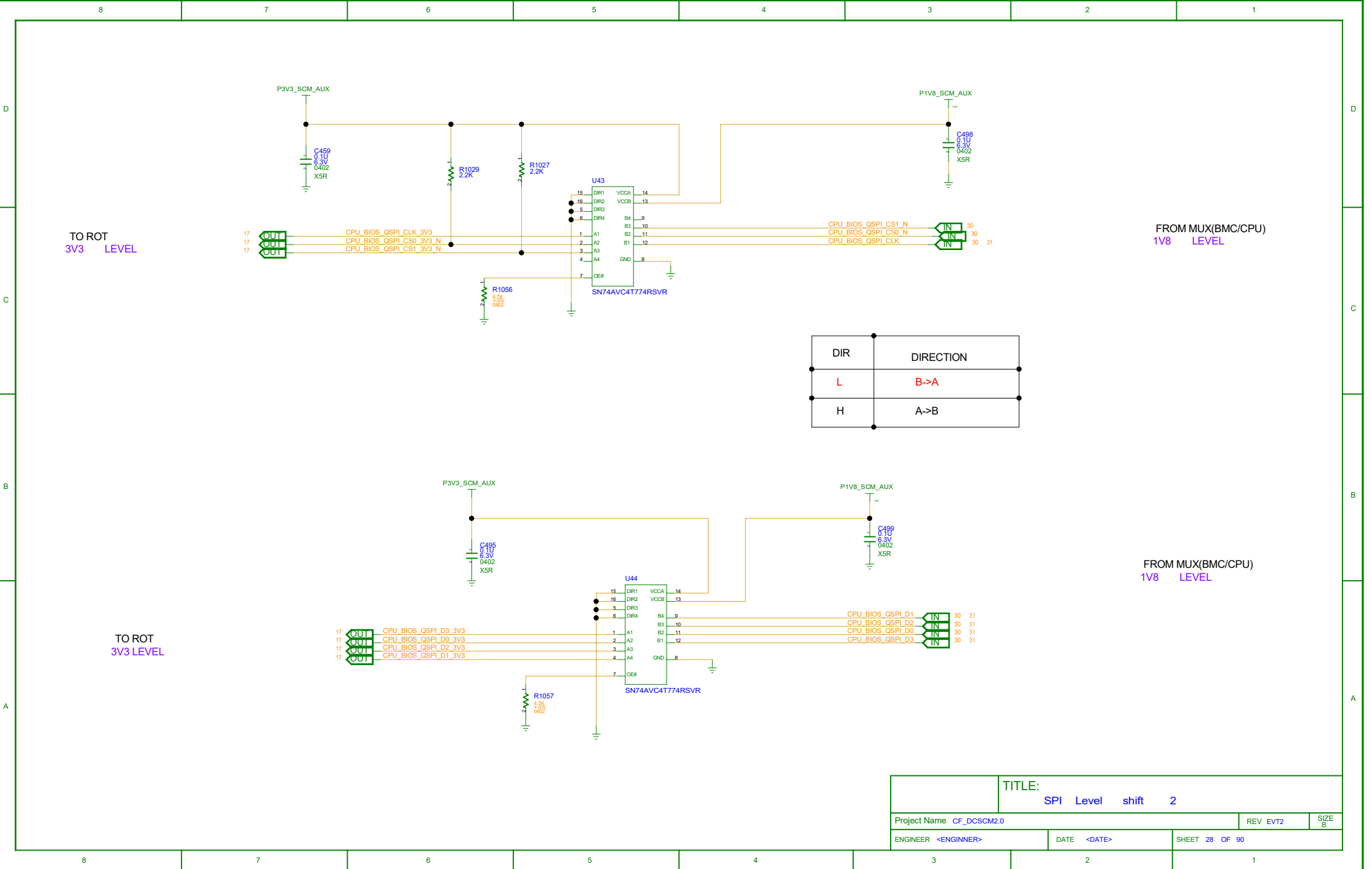
3

2

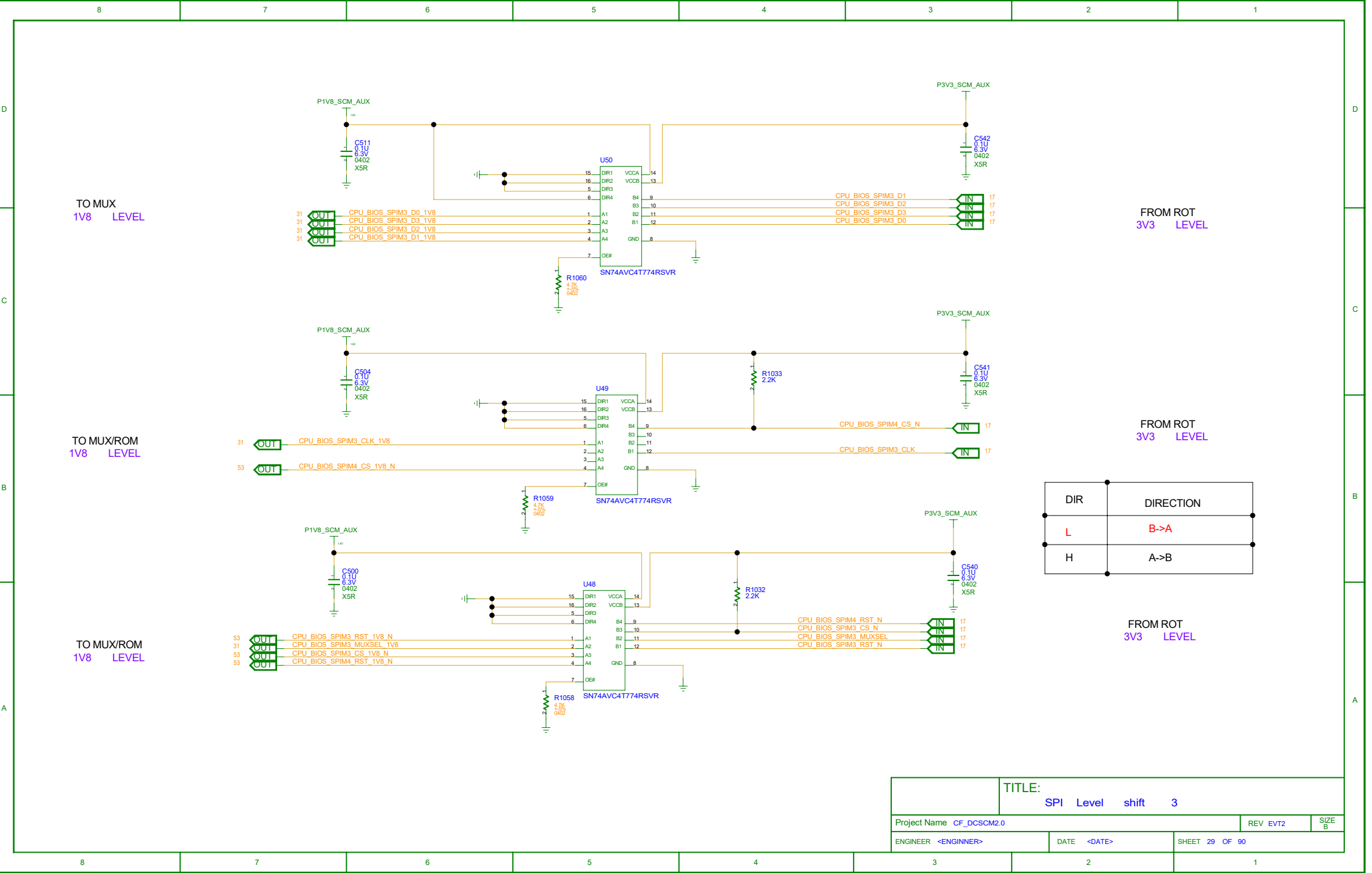
1







TITLE:		SPI Level shift 2	
Project Name CF_DCSCM2.0			REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 28 OF 90



TO MUX
1V8 LEVEL

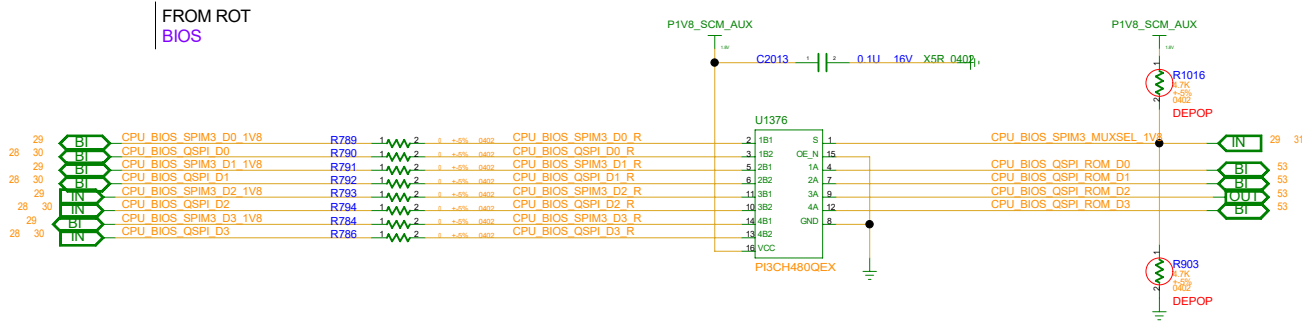
FROM ROT
3V3 LEVEL

TO MUX/ROM
1V8 LEVEL

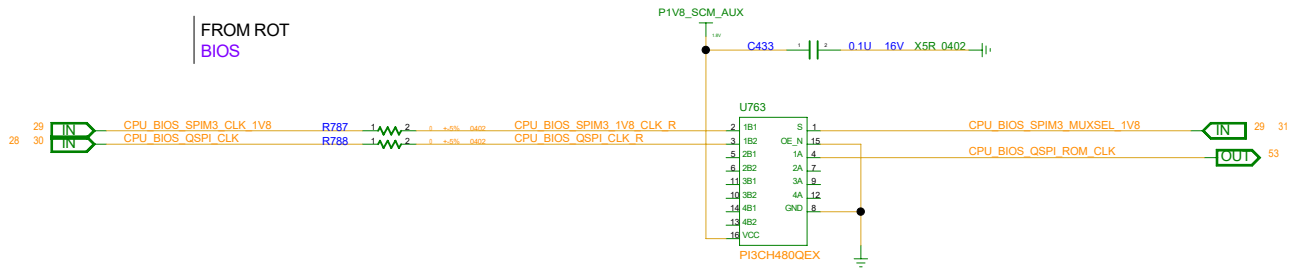
FROM ROT
3V3 LEVEL

TO MUX/ROM
1V8 LEVEL

FROM ROT
3V3 LEVEL



S	MODE
L	SPI VIA ROT
H	SPI NOT VIA ROT



TITLE:		SPI MUX CPU 2 of 2	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET		31 OF 90	

8

7

6

5

4

3

2

1

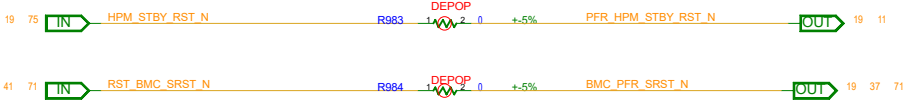
CAD NOTE:

USE HW TO BYPASS ROT_BMC



CAD NOTE:

USE HW TO BYPASS ROT



TITLE:
Bypass ROT

Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 32 OF 90	

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

D

D

C

C

B

B

A

A

----BMC----

		TITLE: ----BMC----		
Project Name CF_DCSCM2.0				REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 33 OF 90	

8

7

6

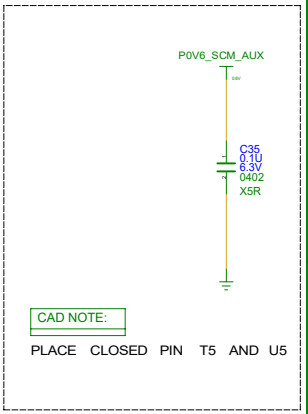
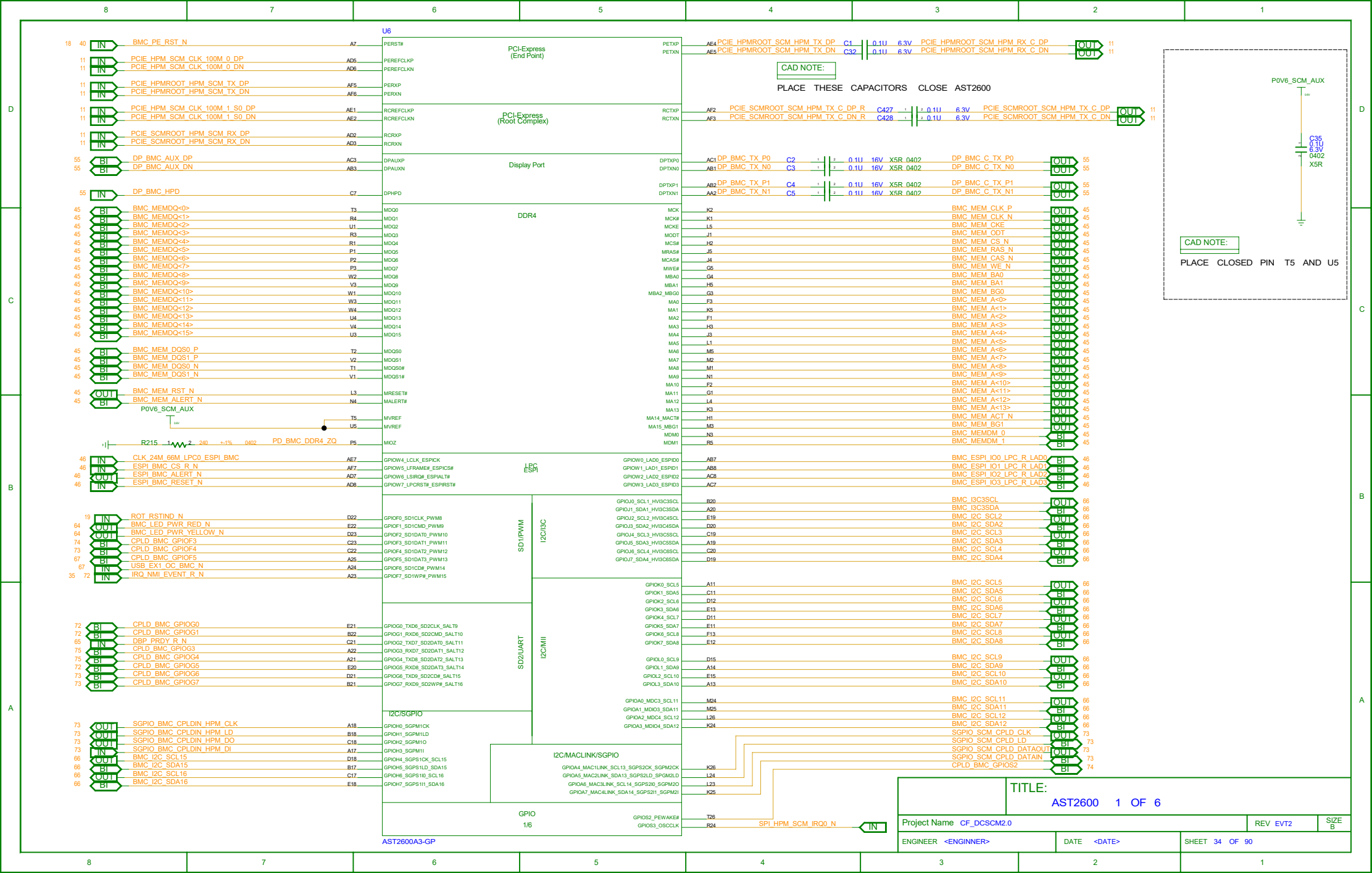
5

4

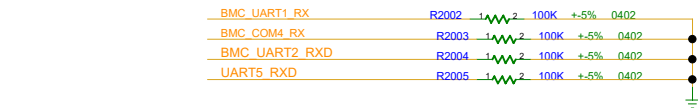
3

2

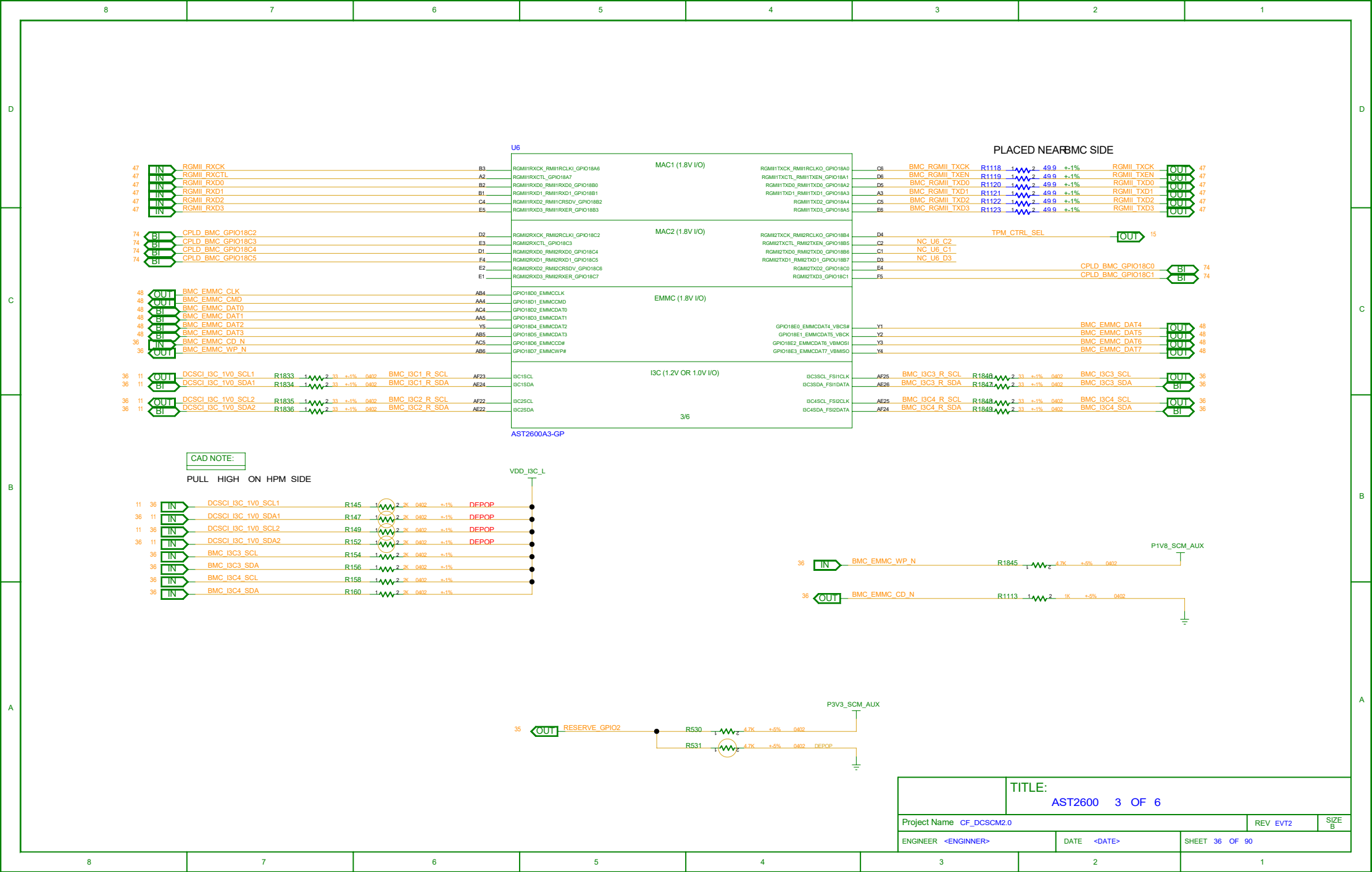
1

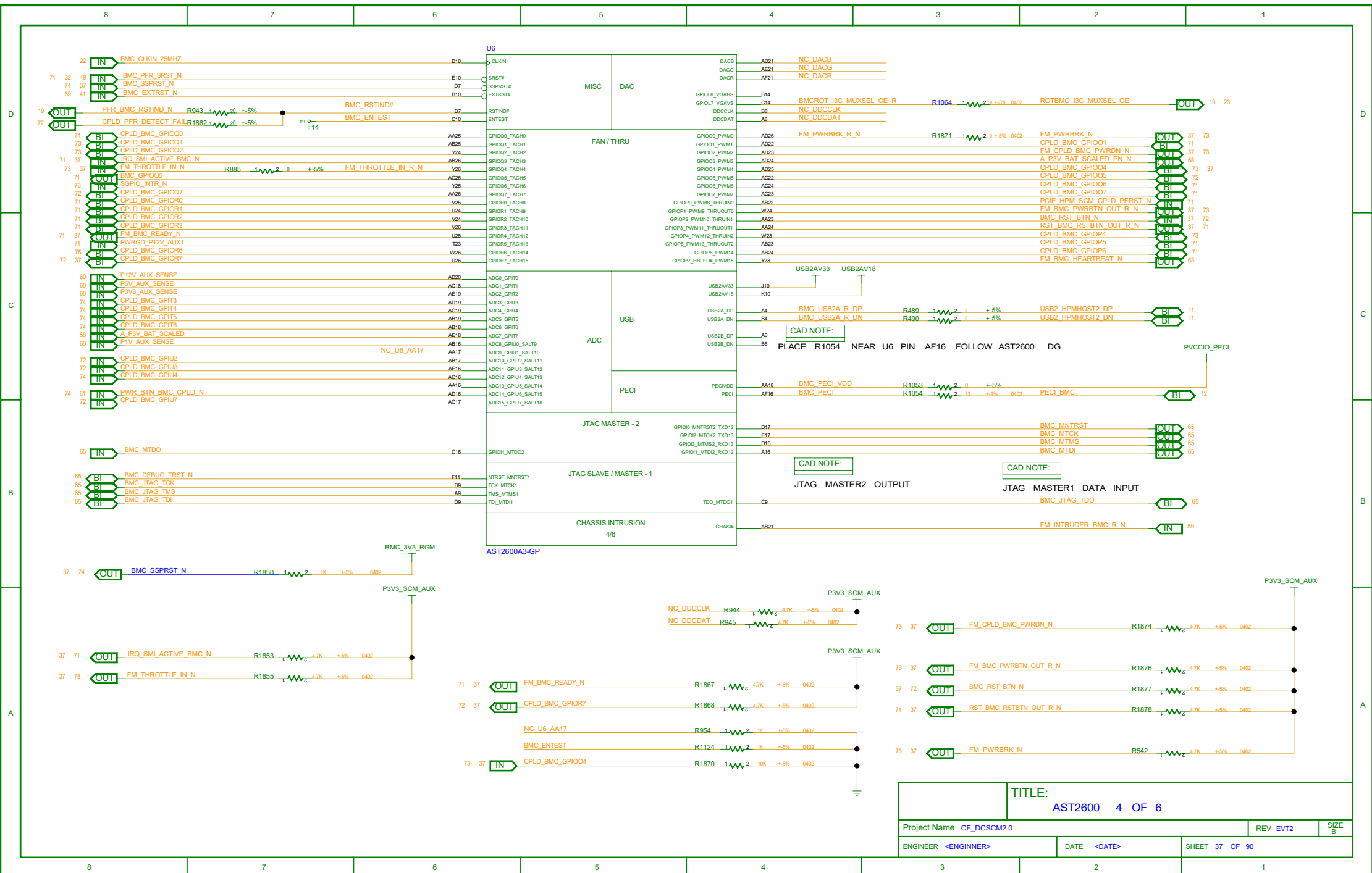


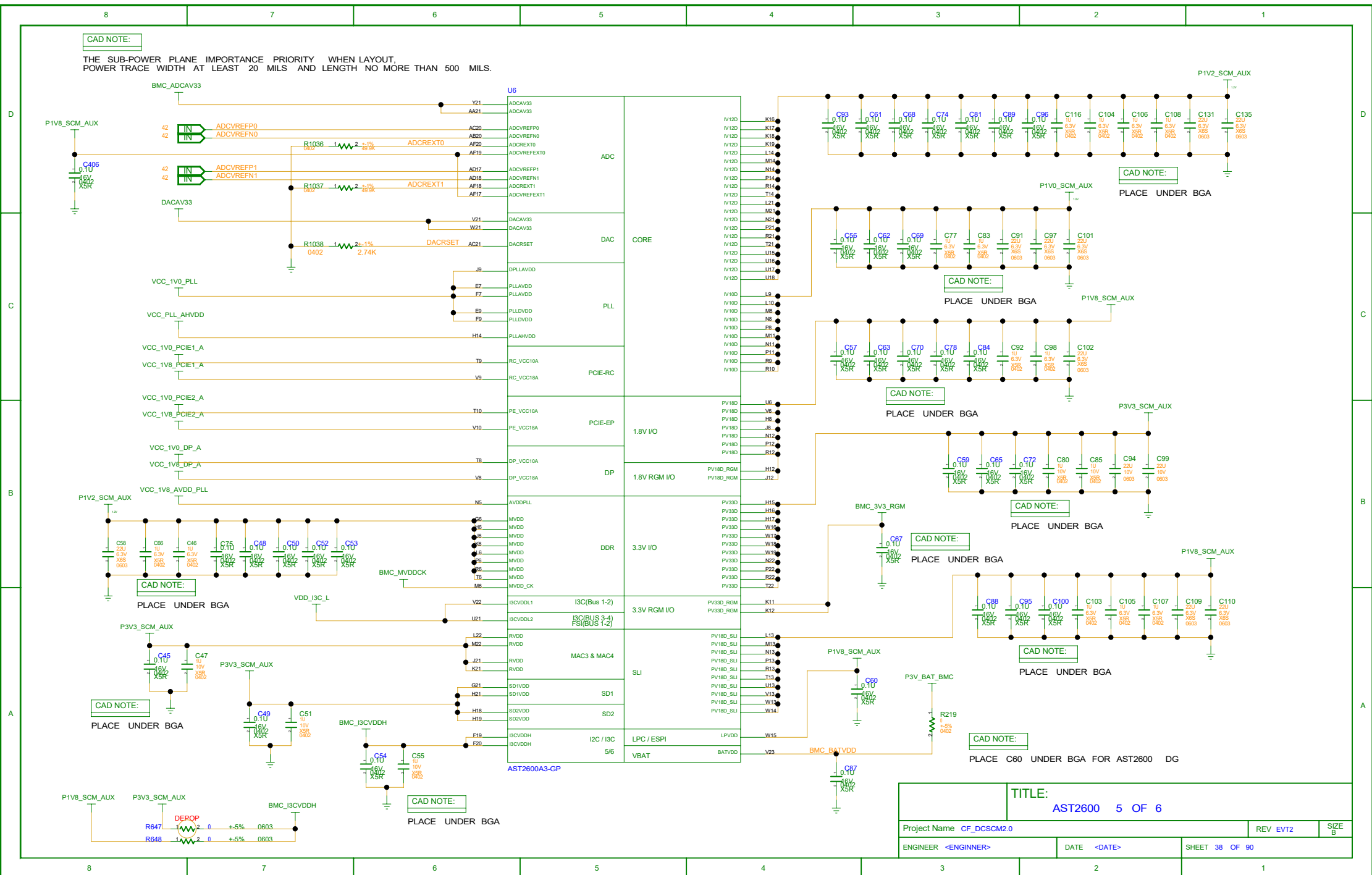
TITLE: AST2600 1 OF 6		Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>		SHEET 34 OF 90	

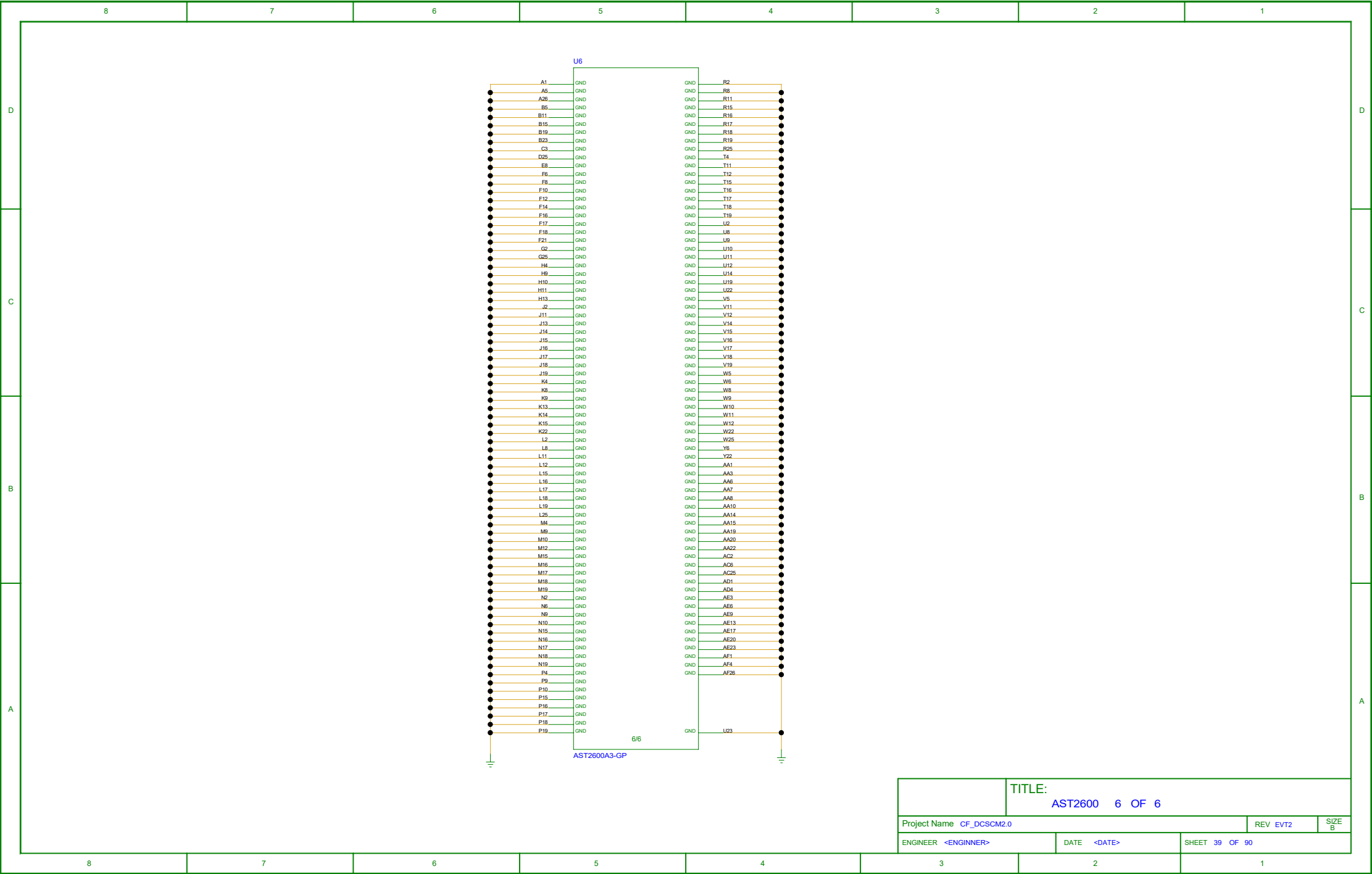


SHEET 35 OF 90

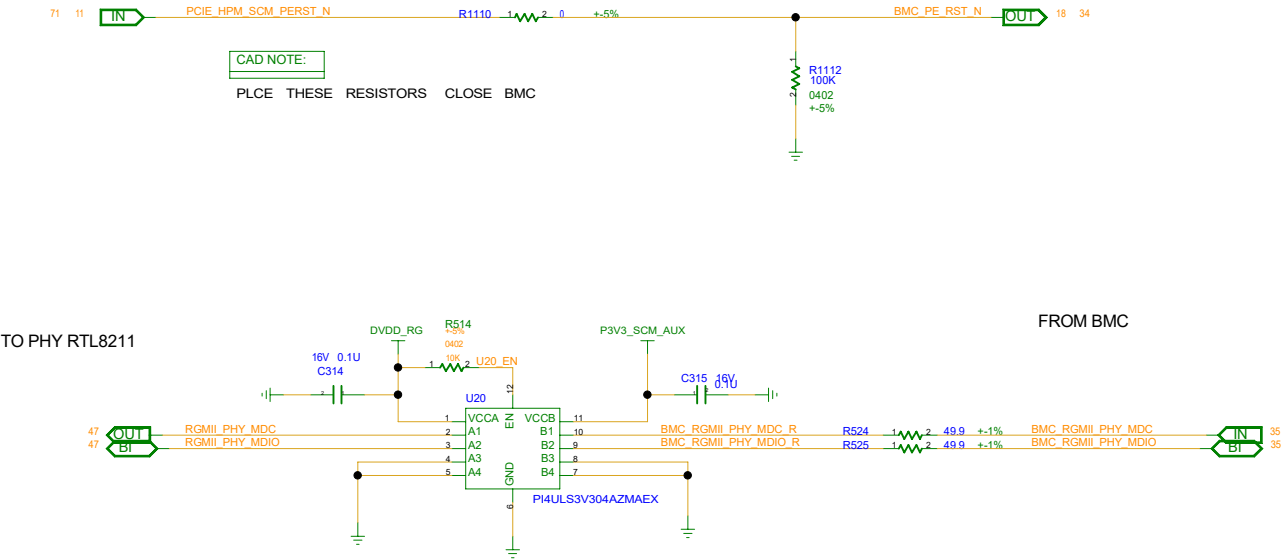






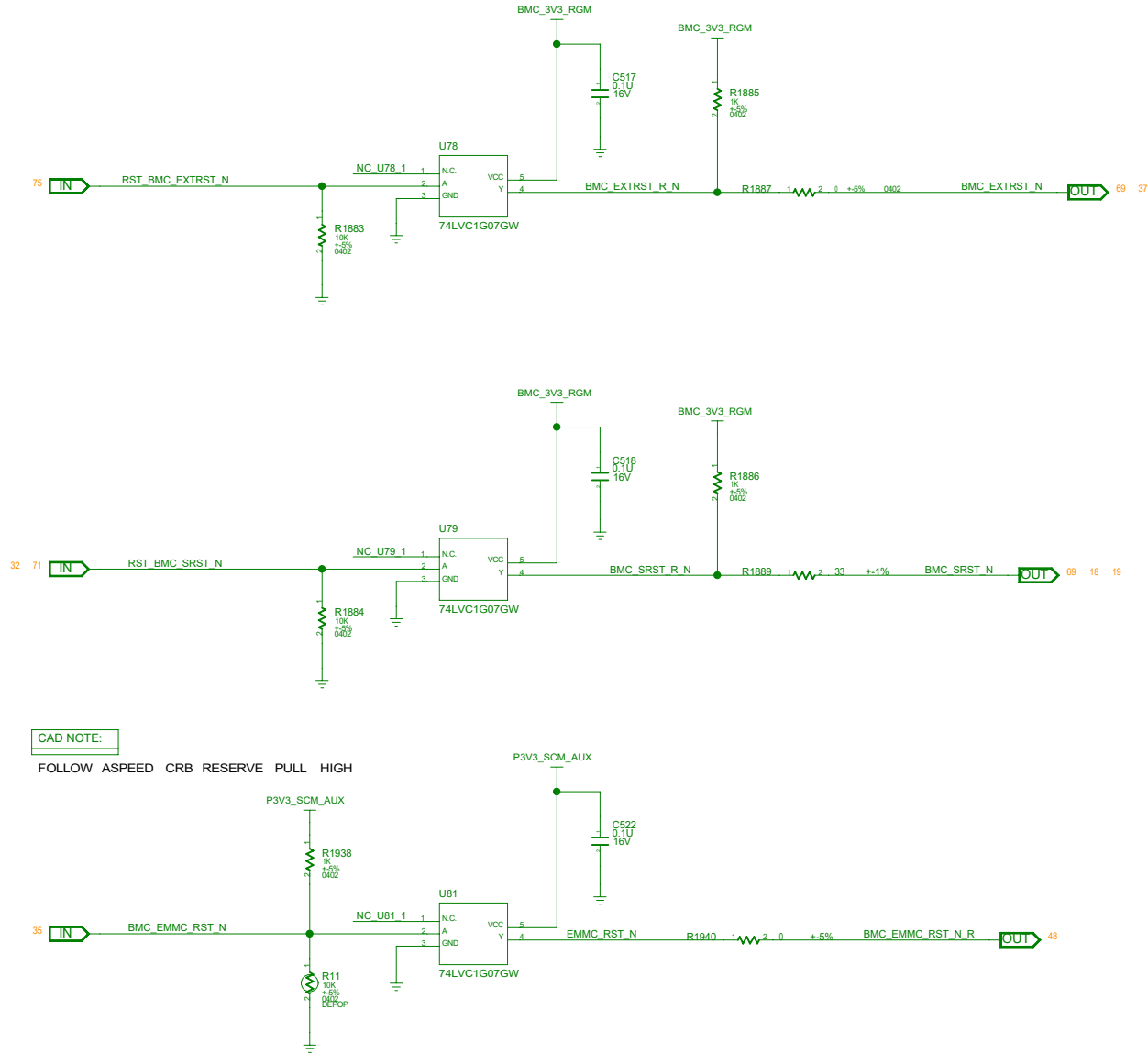


		TITLE: AST2600 6 OF 6		
Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 39 OF 90	

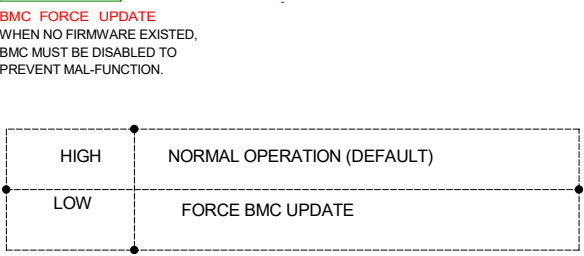
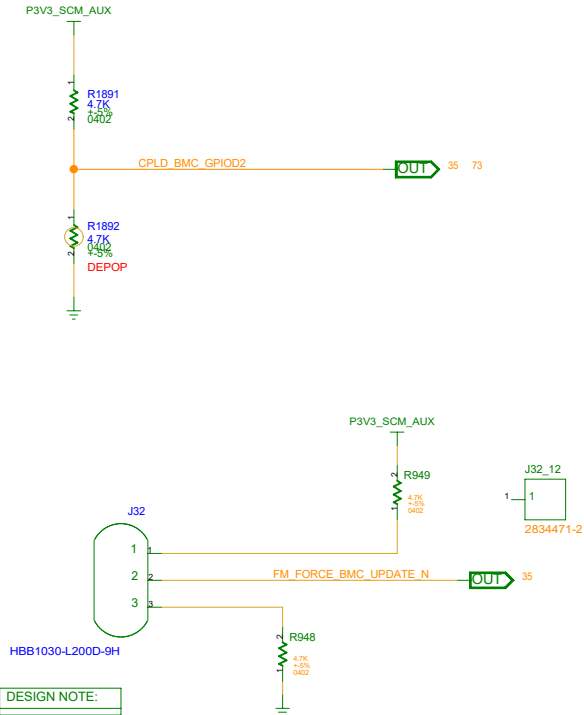


TITLE:		BMC_DAMPING	
Project Name		CF_DCSCM2.0	REV EVT2
ENGINEER		<ENGINEER>	DATE <DATE>
SHEET		40 OF 90	SIZE B

BMC RESET



CAD NOTE:
GPIOY3 IS DEDICATED FOR EMMC RESET IF THE EMMC BOOT IS ENABLE



TITLE: BMC_RST		Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>		SHEET 41 OF 90	

8

7

6

5

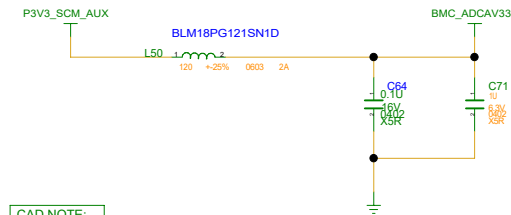
4

3

2

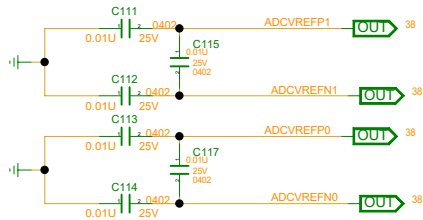
1

ADC

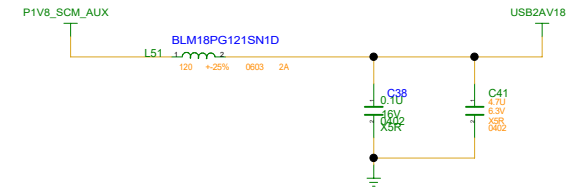


CAD NOTE:

PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE

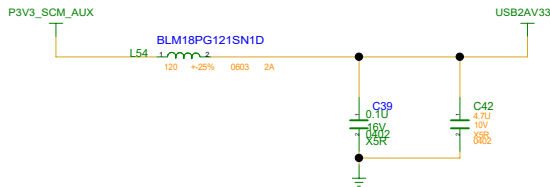


USB



CAD NOTE:

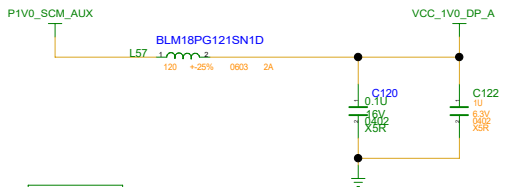
PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE



CAD NOTE:

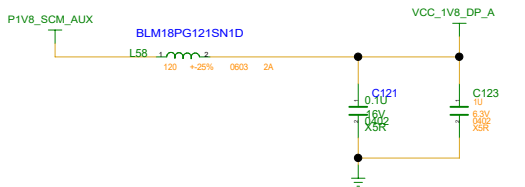
PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE

DP



CAD NOTE:

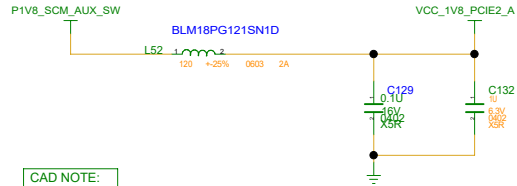
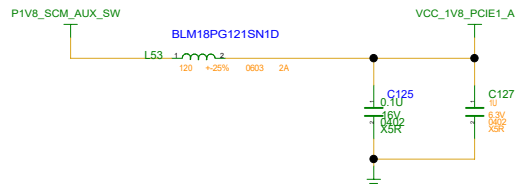
PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE



CAD NOTE:

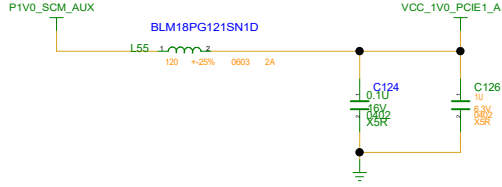
PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE

PCIE



CAD NOTE:

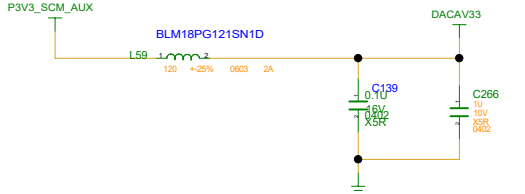
PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE



CAD NOTE:

PLACE THESE DE-COUPLE CAPACITORS ON THE BOTTOM SIDE

DAC



TITLE:

BMC_DECOUPLING 1 OF 2

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 42 OF 90

8

7

6

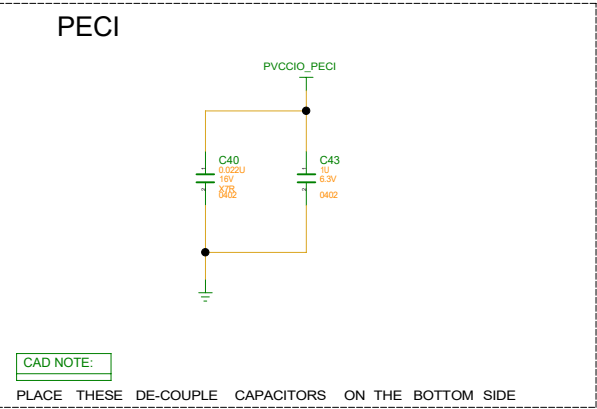
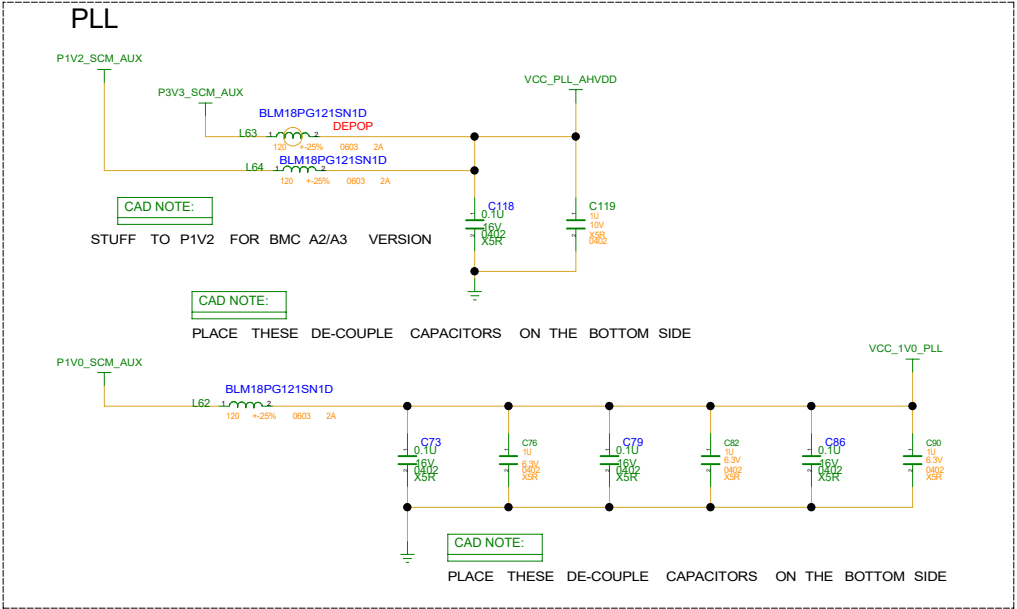
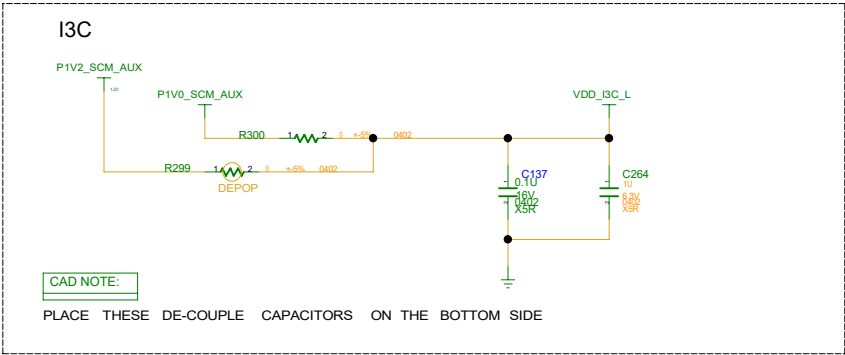
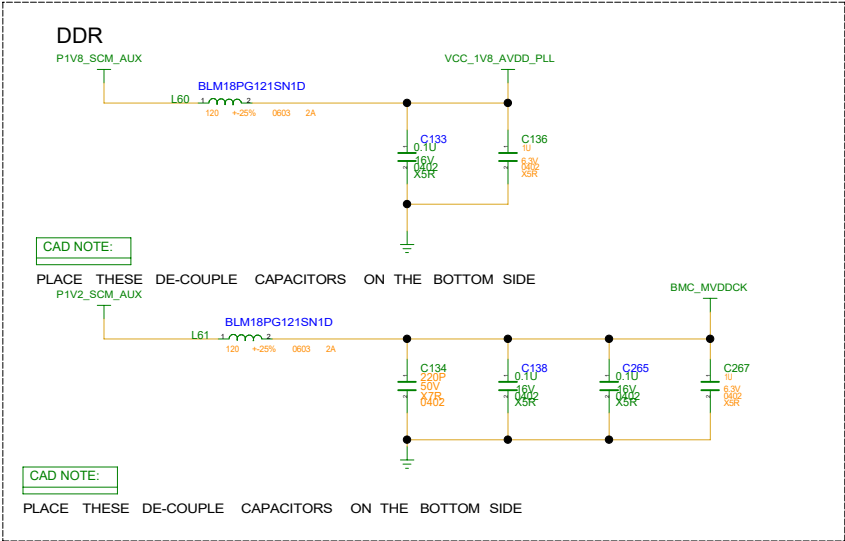
5

4

3

2

1



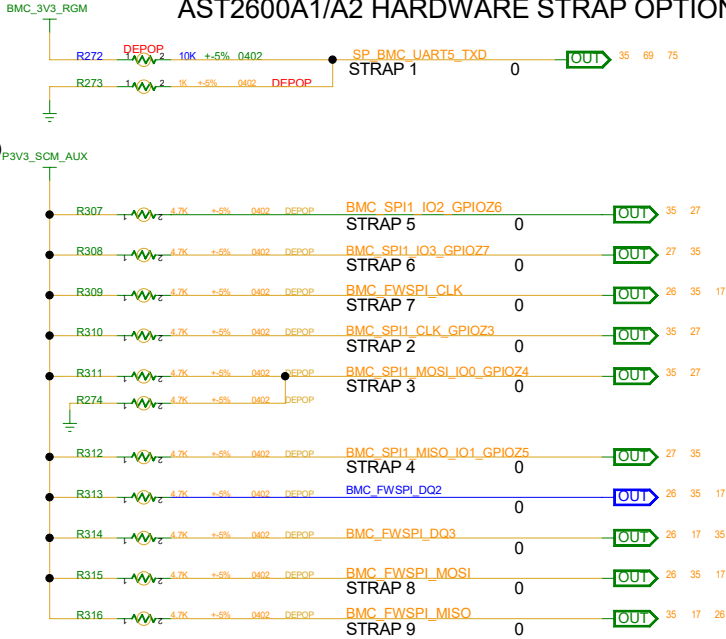
		TITLE: BMC_DECOUPLING 2 OF 2		
Project Name		CF_DCSCM2.0	REV	EVT2
ENGINEER		<ENGINEER>	DATE	<DATE>
		SHEET 43 OF 90		

STRAP FUNCTION PINS WHEN SCU510[30]=0

STRAP NUM	BALL NUM	BALL NAME	DESCRIPTION
1	C8	TXD5	DISABLE CPU BOOT 0: ENABLE BOOT (DFLT) (DEPOP R272 AND R273) 1: DISABLE CPU OPERATION, WHEN NO FIRMWARE EXIST (DEPOP R272 AND POP R273)
2	AB11	GPIOZ3	DISABLE VGA DEVICE(PCIE DEVICE 0) 0: VGA IS ENABLE (DEPOP R310) 1: VGA IS DISABLE (POP R310)
3	AC11	GPIOZ4	SELECTED LPC/ESPI (NEED FIRMWARE) 0: ESPI MODE(DFLT) (DEPOP R311 AND R274) 1: LPC (POP R311)
4	AA11	GPIOZ5	DISABLE HEARTBEAT LED 0: ENABLE HEARTBEAT LED FUNCTION (DEPOP R312) 1: DISABLE HEARTBEAT LED FUNCTION (POP R312)
5	AD11	GPIOZ6	ENABLE GPIO PASS THROUGH 0: DISABLE GPIO PASS THROUGH FUNCTION ON GPIOP[5:0] (DEPOP R307) 1: ENABLE GPIO PASS THROUGH FUNCTION ON GPIOP[5:0] (POP R307)
6	AF10	GPIOZ7	ENABLE ACPI FUNCTION. 0: DISABLE ACPI FUNCTION. (DEPOP R308) 1: ENABLE ACPI FUNCTION. (POP R308)
7	AF13	FWSPICK	ENABLE BOOT FROM UART5 BY PIN STRAP 0: DISABLE(DFLT) (DEPOP R309) 1: ENABLE (POP R309)
8	AC14	FWSPIMOSI	ENABLE SECURE BOOT BY PIN STRAP 0: DISABLE (DEPOP R315) 1: ENABLE (POP R315)
9	AB13	FWSPIMISO	ENABLE LOW SECURITY SECURE BOOT KEY BY PIN STRAP 0: DISABLE (DEPOP R316) 1: ENABLE (POP R316)

THE STRAP NUM 2/4/5/6 USED FOR A2 VERSION

AST2600A1/A2 HARDWARE STRAP OPTION TABLE



DESIGN NOTE: BMC_SPI1_MOSI_IO0_GPIOZ4
0: SYSTEM IS CONFIGURED FOR ESPI(DEFAULT)
1: SYSTEM IS CONFIGURED FOR LPC

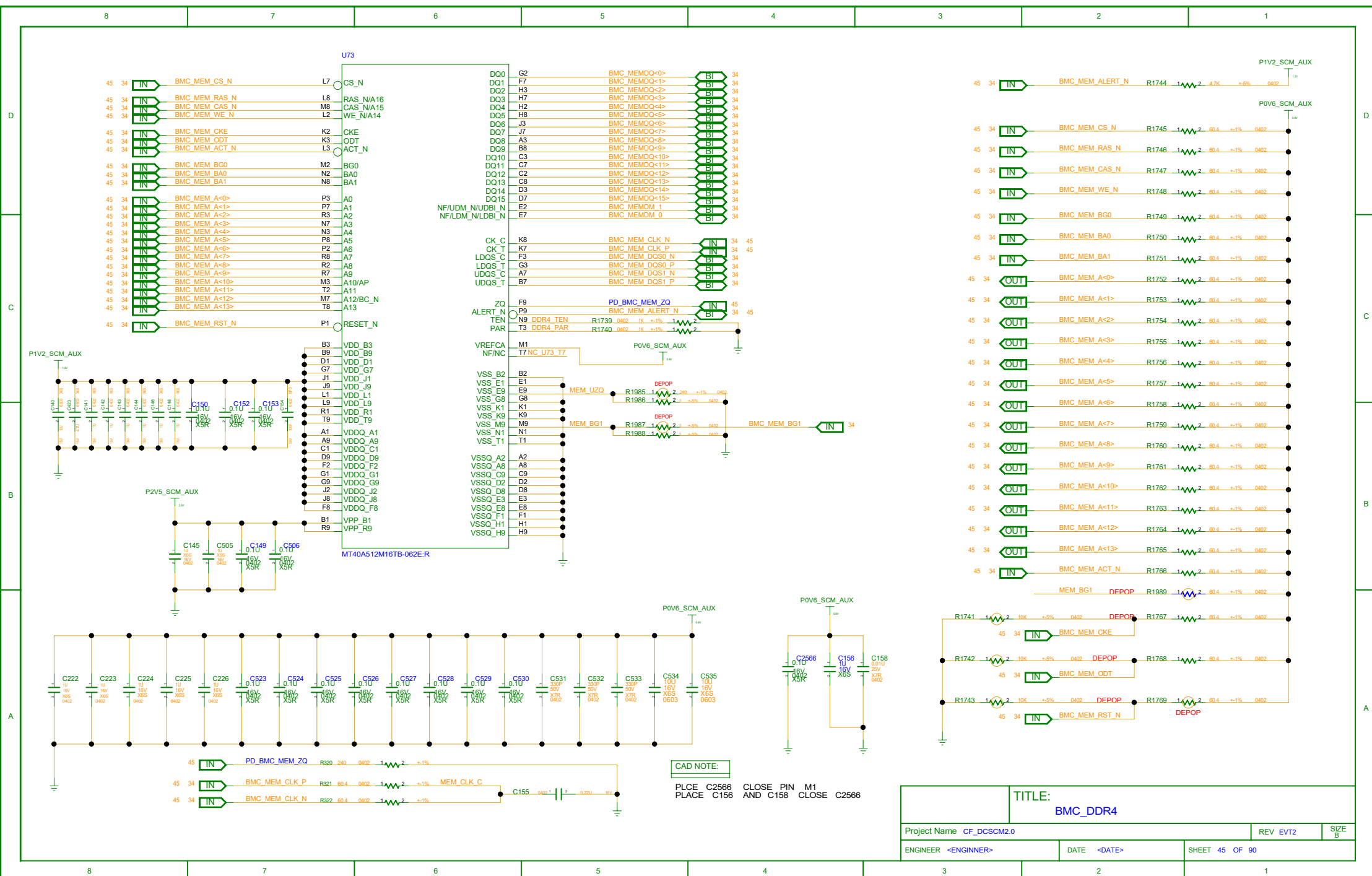
DESIGN NOTE: GPIOY4/5
PLEASE CHECK FLASH SIDE FOR PULL HIGH
OR PULL DOWN IF ENABLE QSPI MODE

DESIGN NOTE: TXD5
EMBEDDED INTERNAL PULL HIGH RESISTOR OF VALUE 26K~71K
PLEASE ADD EXTERNAL 10K OHM PULL-UP FOR A0 CHIP.
- STRAP VALUE = 0 JUST LEAVE THE PIN FLOATING OR PULL UP.
- STRAP VALUE = 1 PULL-DOWN THE PIN TO GROUND BY A RESISTOR OF VALUE 1K~4.7K.

DESIGN NOTE: FWSPICK,FWSPIMOSI,FWSPIMISO
EMBEDDED INTERNAL PULL LOW OF VALUE 33K~89K
-STRAP VALUE = 0,JUST LEAVE THE PIN FLOATING.
-STRAP VALUE = 1,PULL-HIGH THE PIN TO 3.3V STANDBY
POWER BY A RESISTOR OF VALUE 1K~4.7K.

DESIGN NOTE: GPIOY[5:4],GPIOZ[7:3]
EMBEDDED INTERNAL PULL LOW OF VALUE 33K~89K
-STRAP VALUE = 0,JUST LEAVE THE PIN FLOATING.
-STRAP VALUE = 1,PULL-HIGH THE PIN TO 3.3V STANDBY POWER BY
A RESISTOR OF VALUE 1K~4.7K.

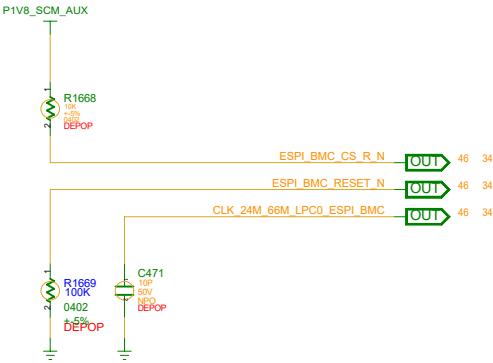
TITLE:
BMC_STRAPS_TABLE



ESPI DAMPING RESISTOR

CAD NOTE:

PLACE THESE RESISTOR CLOSE BMC WITHIN 1"



TITLE:

BMC_ESPI

Project Name CF_DCSCM2.0

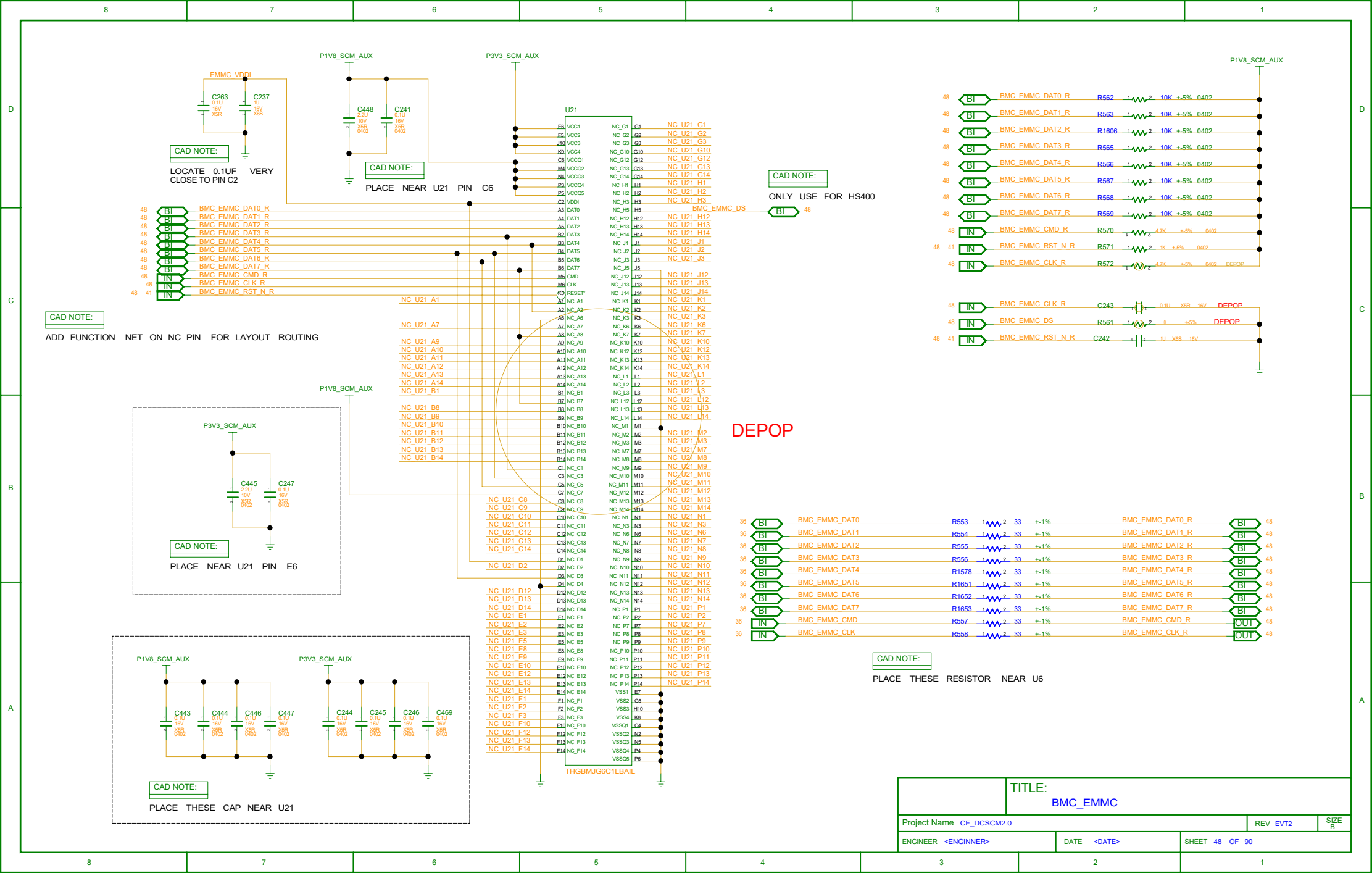
REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 46 OF 90



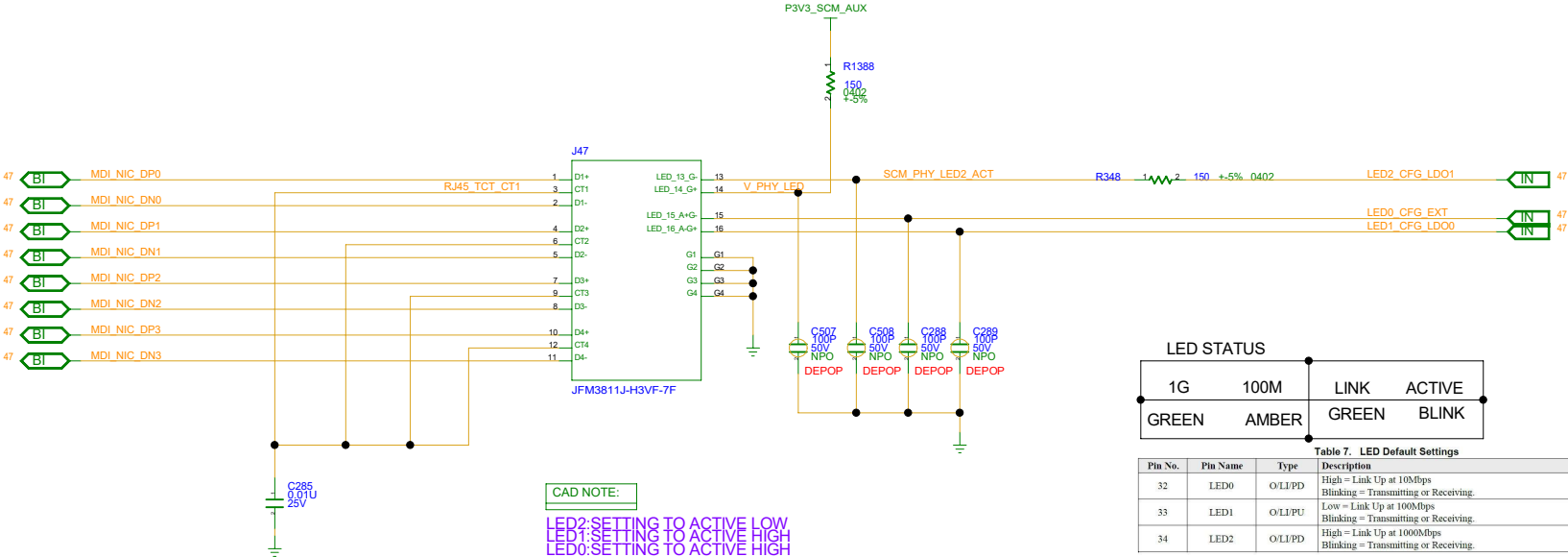


Table 17. LED Configuration Table – Mode A					
Pin	LINK Bit			Active (TX/RX) Bit	Description
	10Mbps	100Mbps	1000Mbps		
Dual LED { LED0 LED1 LED2	0	0	0	0	N/A. Note: No LPI mode for this setting
	0	0	0	1	N/A. Note: No LPI mode for this setting
	0	0	1	0	Link 1000
	0	0	1	1	Link 1000+Active 1000
	0	1	0	0	Link 100
	0	1	0	1	Link 100+Active 100
	0	1	1	0	Link 100/1000
	0	1	1	1	Link 100/1000+Active 100/1000
	1	0	0	0	Link 10
	1	0	0	1	Link 10+Active 10
	1	0	1	0	Link 10/1000
	1	0	1	1	Link 10/1000+Active 10/1000
	1	1	0	0	Link 10/100
	1	1	0	1	Link 10/100+Active 10/100
	1	1	1	0	Link 10/100/1000
	1	1	1	1	Link 10/100/1000+Active 10/100/1000

千兆管理网 □ LINK 状态灯	Amber/Green	常亮	1000BASE-T: Amber 1000BASE-T: Green 10BASE-T/No Link: off
---------------------	-------------	----	---

TITLE: BMC_RJ45		Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>		SHEET 49 OF 90	

8

7

6

5

4

3

2

1

EMPTY

TITLE:

EMPTY

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 50 OF 90

8

7

6

5

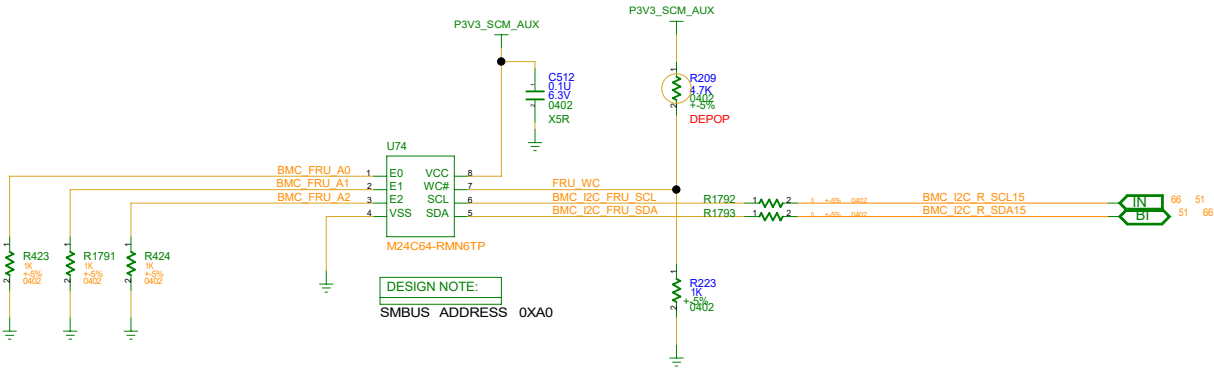
4

3

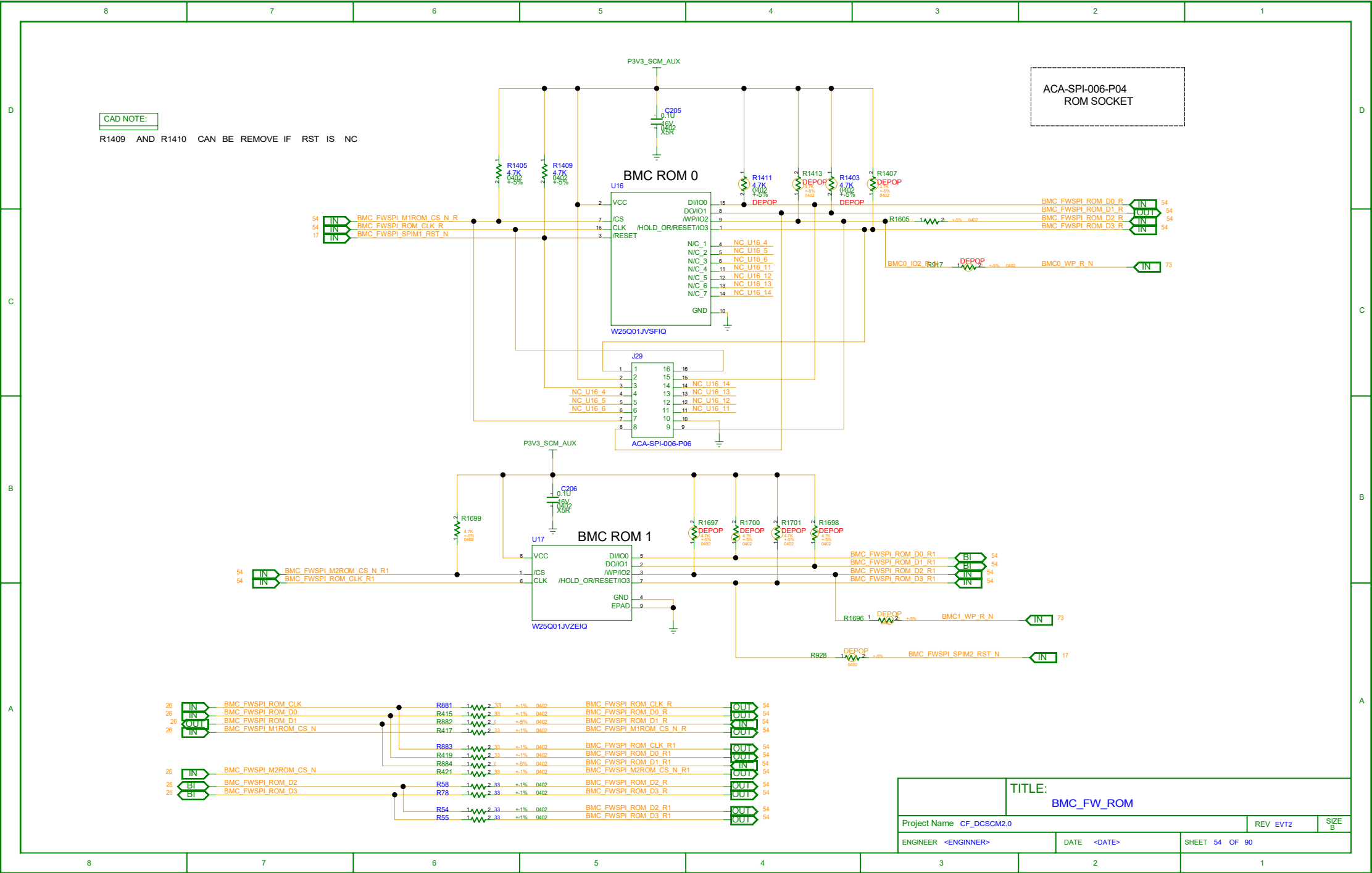
2

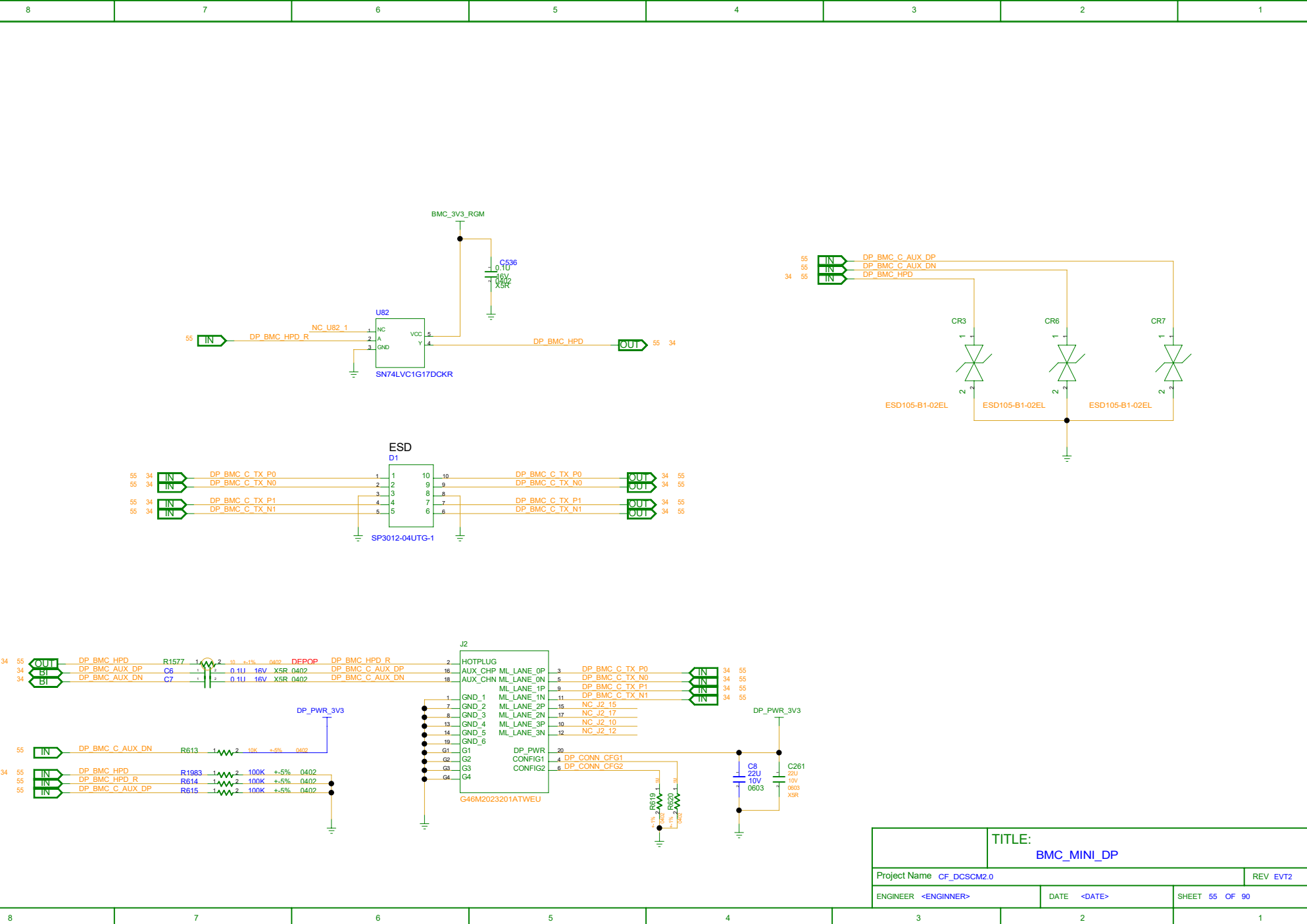
1

FRU



TITLE:		BMC_FRU	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 52 OF 90





TITLE: BMC_MINI_DP		
Project Name	CF_DCSCM2.0	REV EVT2
ENGINEER	<ENGINEER>	DATE <DATE>
SHEET 55 OF 90		SIZE B

8

7

6

5

4

3

2

1

EMPTY

TITLE:

BLANK

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 56 OF 90

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

EMPTY

TITLE:

EMPTY

Project Name CF_DCSCM2.0

REV EVT2

SIZE B

ENGINEER <ENGINEER>

DATE <DATE>

SHEET 57 OF 90

8

7

6

5

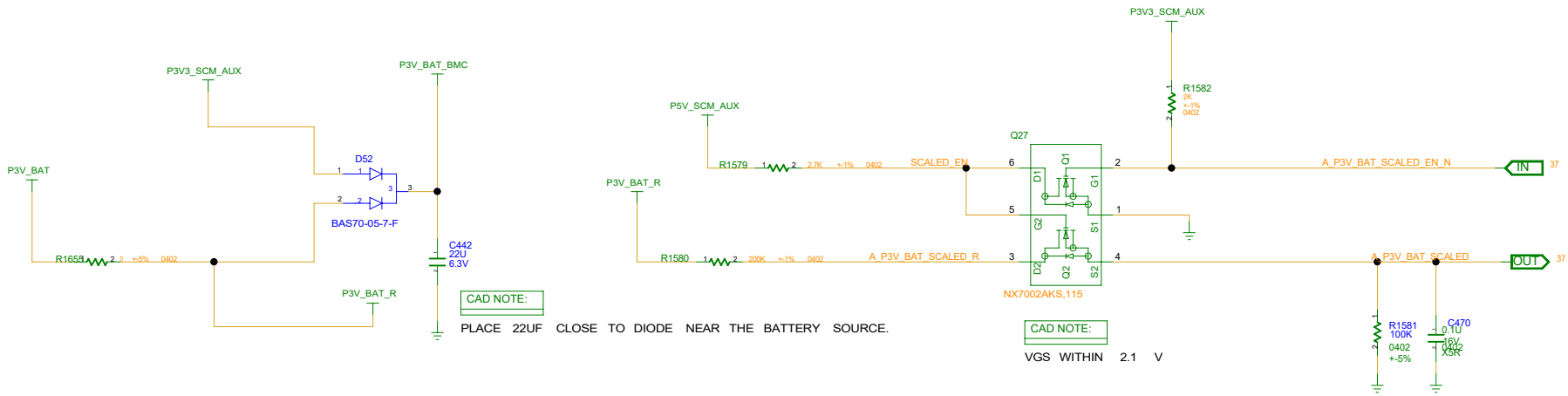
4

3

2

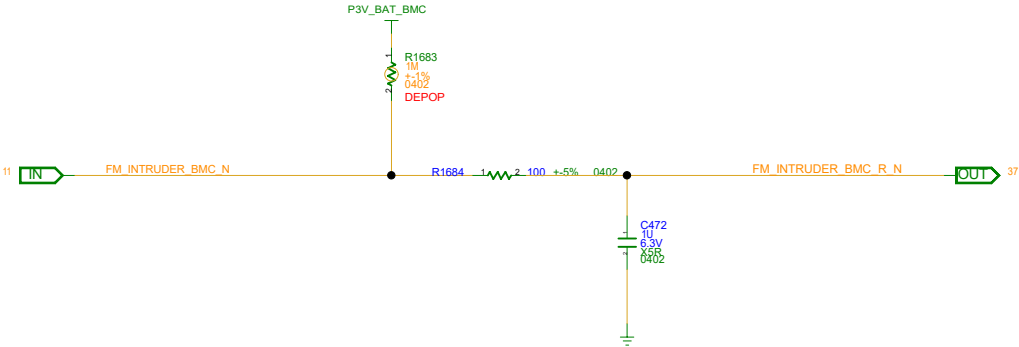
1

BATTERY

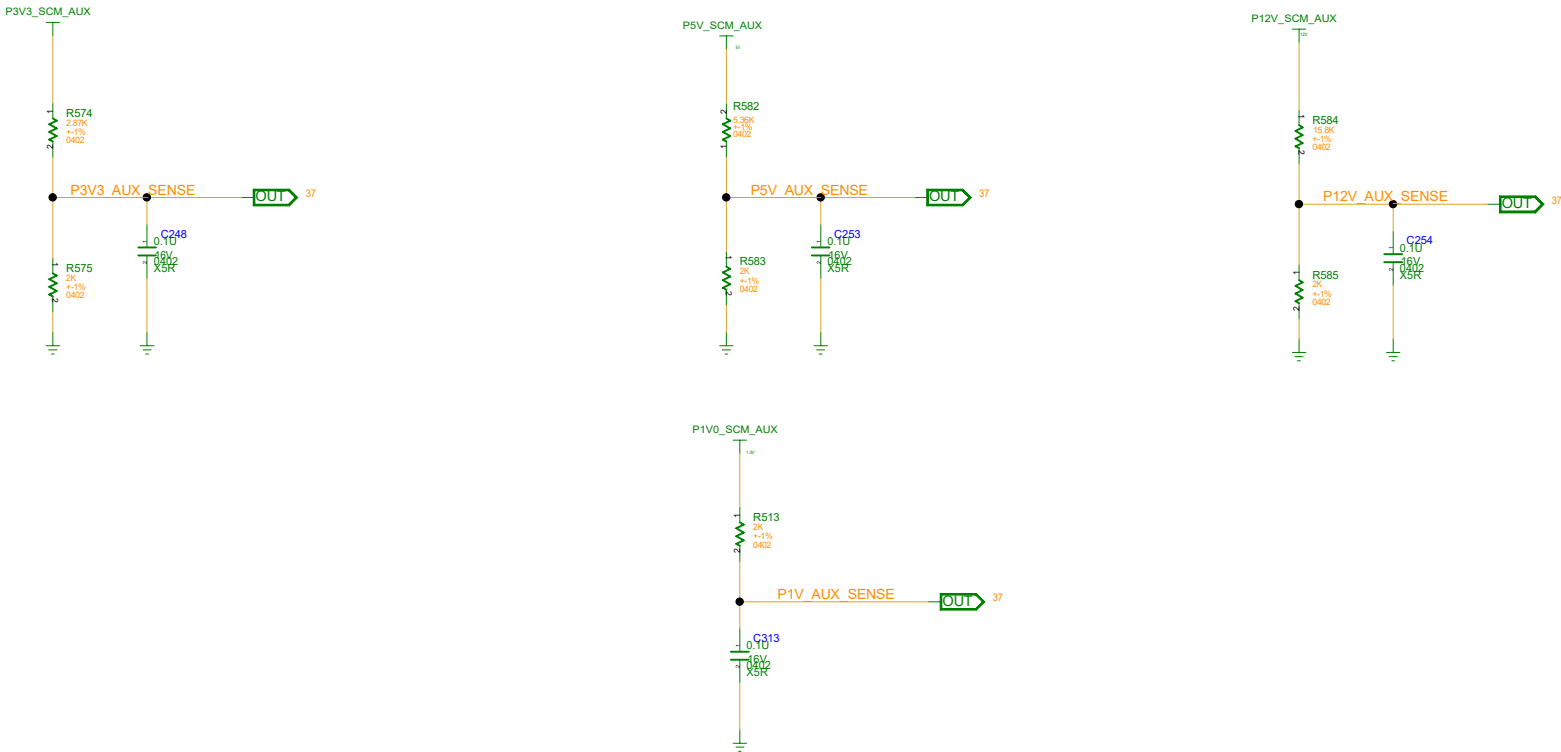


TITLE:		BATTERY	
Project Name		CF_DCSCM2.0	REV EVT2
ENGINEER		<ENGINEER>	DATE <DATE>
SHEET		58 OF 90	SIZE B

INTRUSION

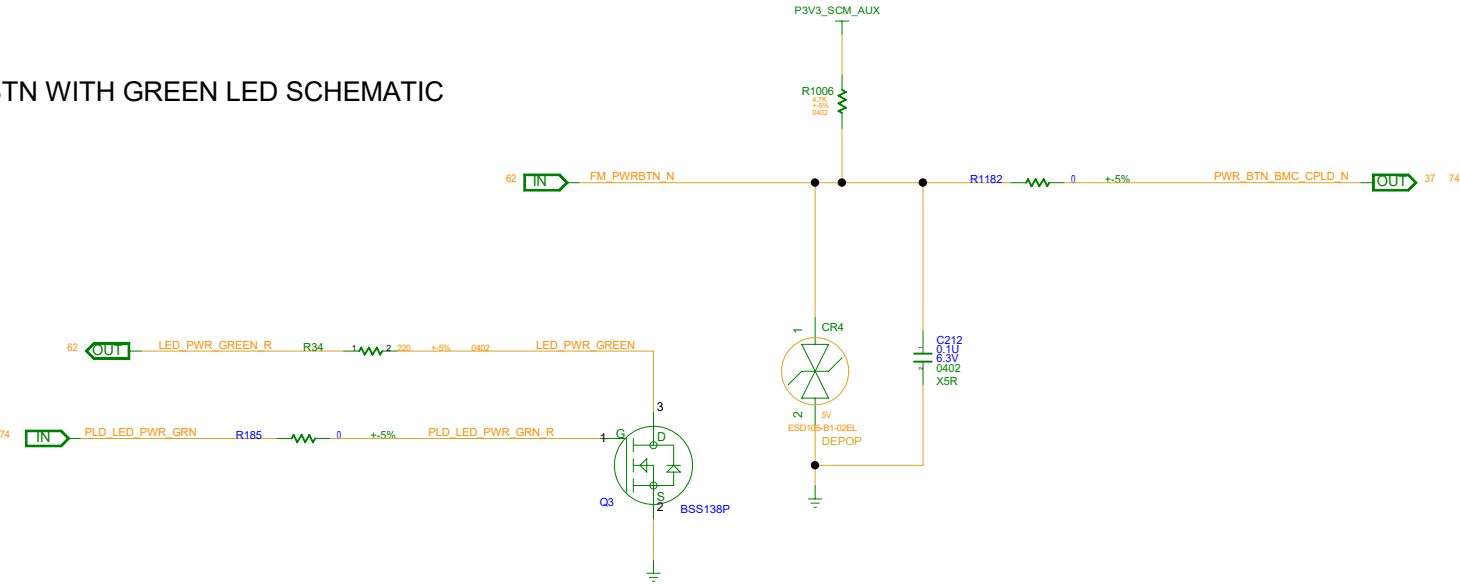


TITLE:		INTRUSION	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET 59 OF 90		SIZE B	

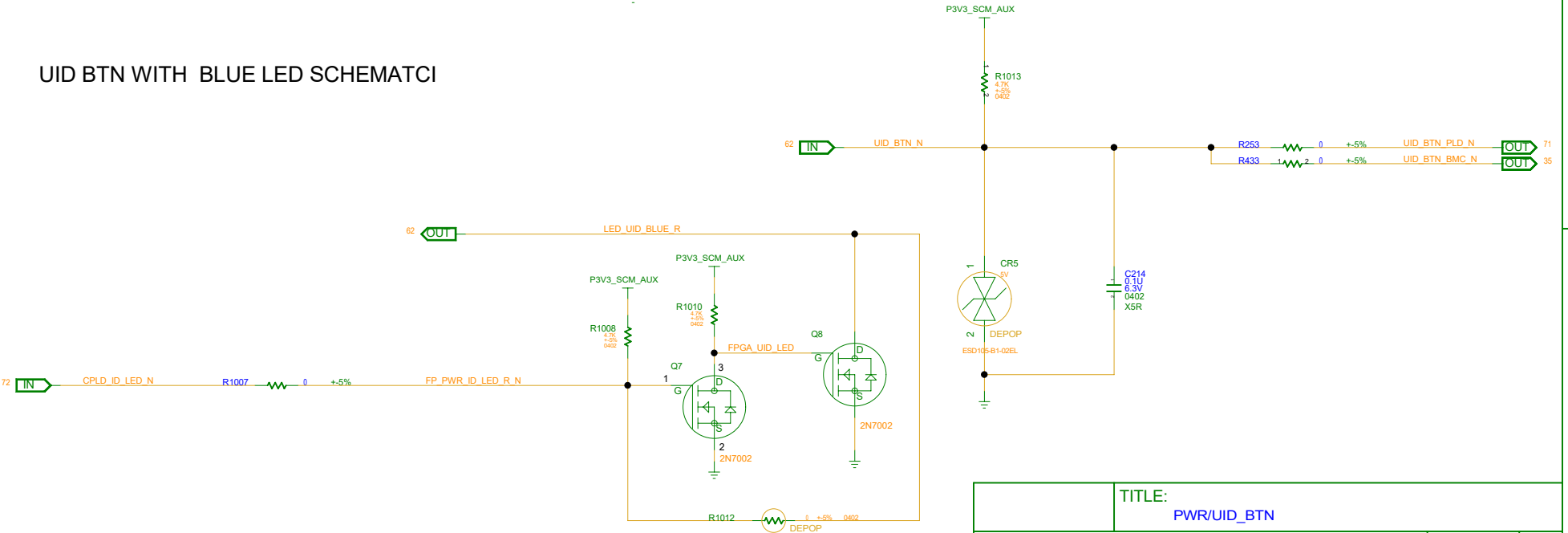


TITLE:		ADC	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET		60	OF 90

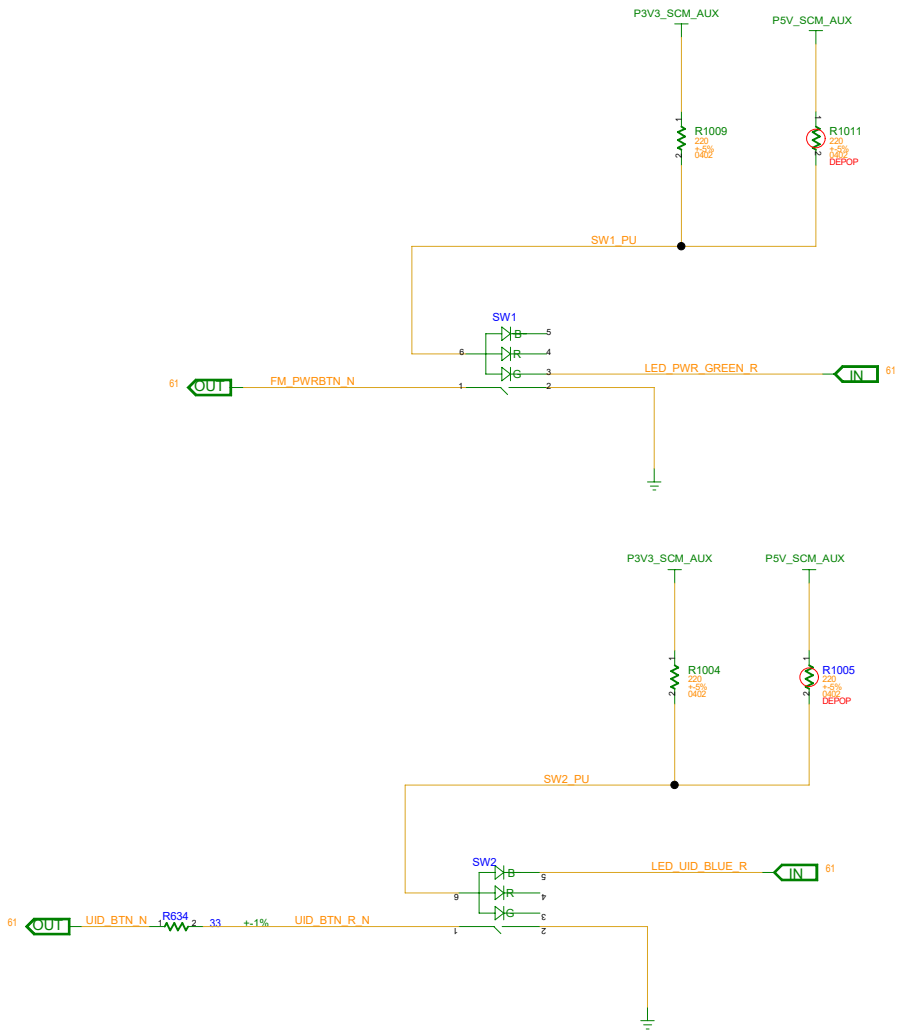
PWR BTN WITH GREEN LED SCHEMATIC



UID BTN WITH BLUE LED SCHEMATIC



TITLE:			PWR/UID_BTN	
Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 61 OF 90	



PWR BTN WITH GREEN LED

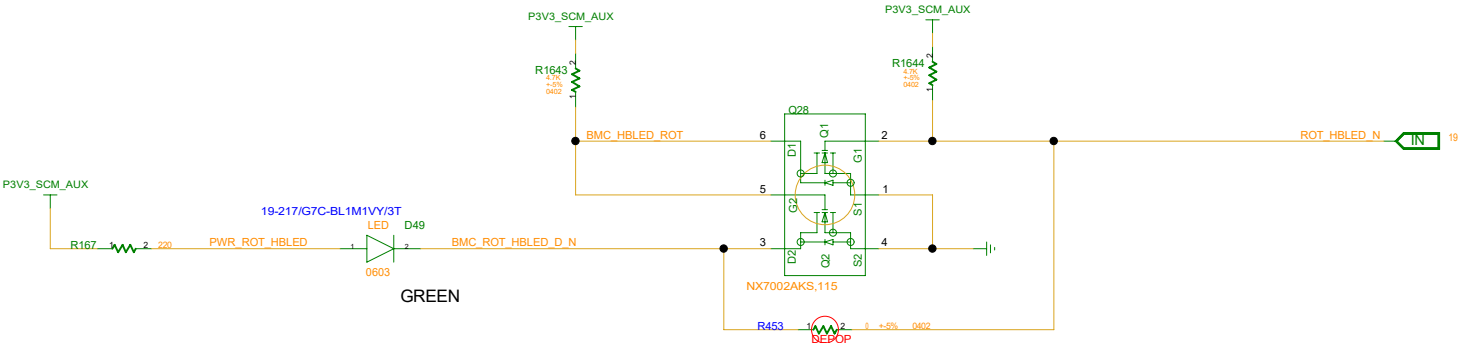
J24
TALPAH67-TR2A0-2B

UID BTN WITH BLUE LED

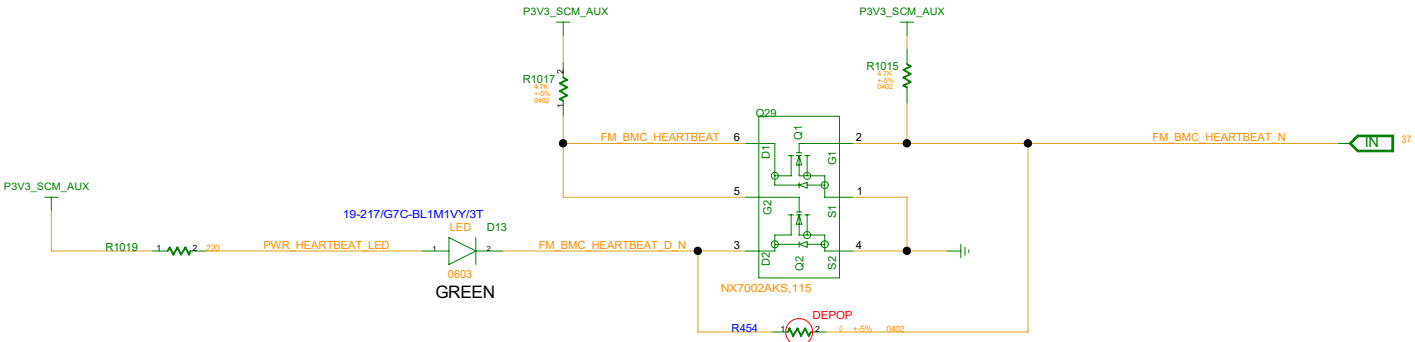
J25
TALPAH67-TR2A0-2B

TITLE:		PWR/UID BTN		
Project Name		CF_DCSCM2.0	REV	EVT2
ENGINEER		<ENGINEER>	DATE	<DATE>
SHEET		62 OF 90	SIZE	

ROT HB LED

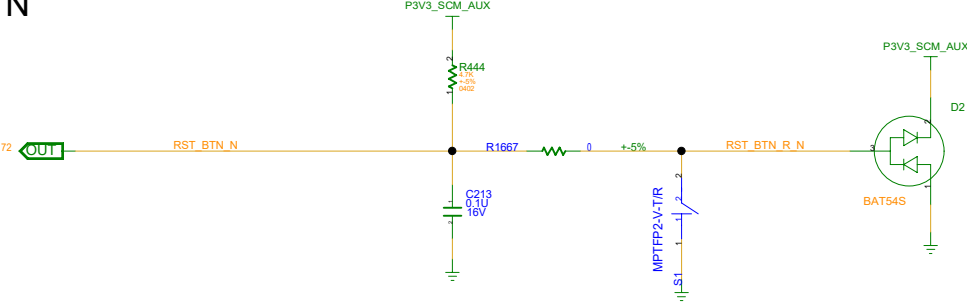


BMC HB LED

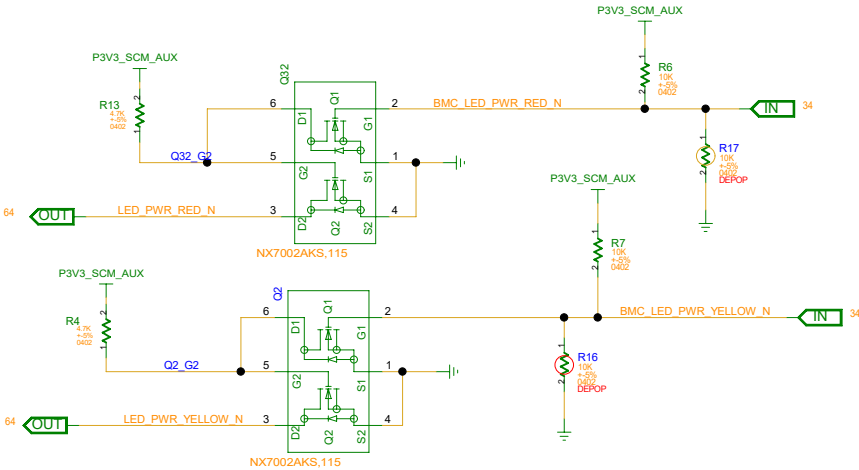
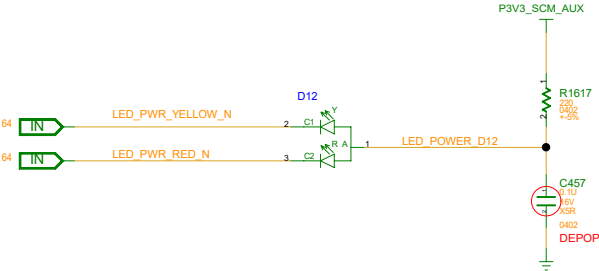


		TITLE: INTERNAL_LED		
Project Name CF_DCSCM2.0				REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 63 OF 90	

RESET BTN

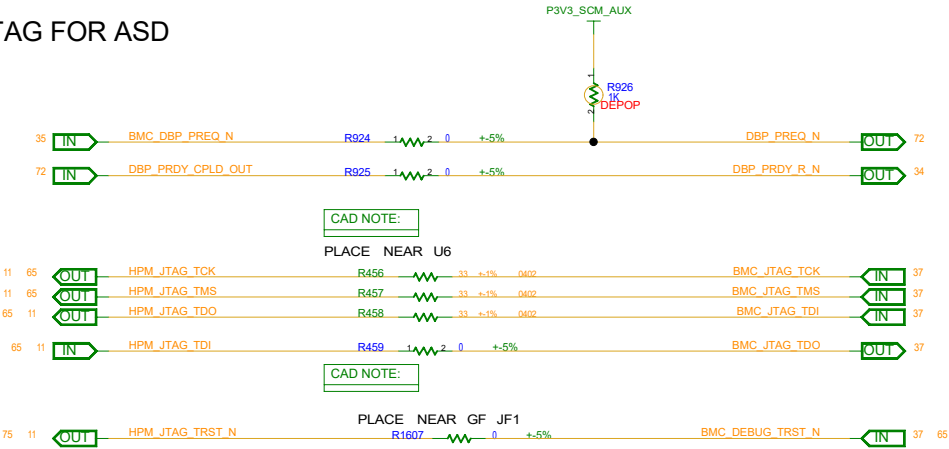


SYSTEM STATUS LED



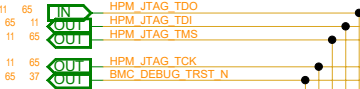
TITLE:		RESET BTN/SYSTEM STATUS LED		
Project Name		CF_DCSCM2.0	REV	EVT2
ENGINEER		<ENGINEER>	DATE	<DATE>
SHEET		64	OF	90

JTAG FOR ASD



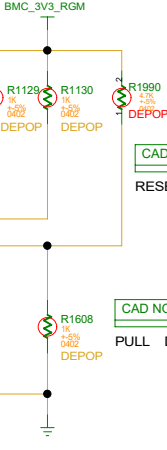
CAD NOTE:

PULL HIGH ON HPM SIDE PREVENT POWER LEAKAGE



CAD NOTE:

RESERVE FOR BMC DEBUG



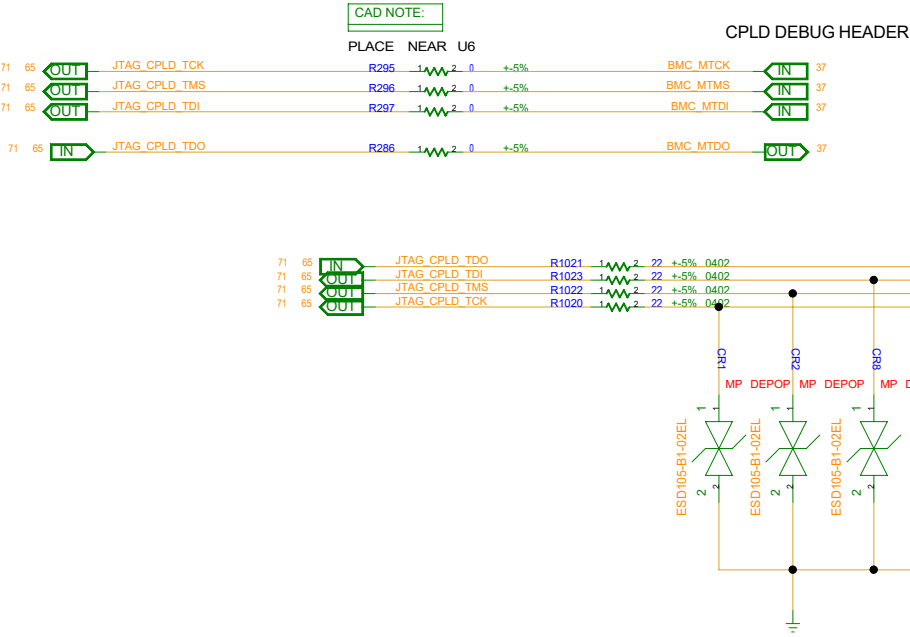
CAD NOTE:

RESERVE A PU FOR AST2600 PROPOSAL

CAD NOTE:

PULL DOWN ON HPM SIDE

JTAG FOR CPLD



P3V3_SCM_AUX

MBRA340T3G

MP DEPOP

P3V3_JTAG_CPLD

MP DEPOP

J21

70262-0628

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

ESD105-B1-40ZEL

P3V3_SCM_AUX

R364 4.7K

R365 4.7K

R367 4.7K

R366 4.7K

R368 4.7K

R369 4.7K

R370 4.7K

R371 4.7K

R372 4.7K

R373 4.7K

R374 4.7K

R375 4.7K

R376 4.7K

R377 4.7K

R378 4.7K

R379 4.7K

TITLE:

JTAG/HEADER

Project Name CF_DCSCM2.0

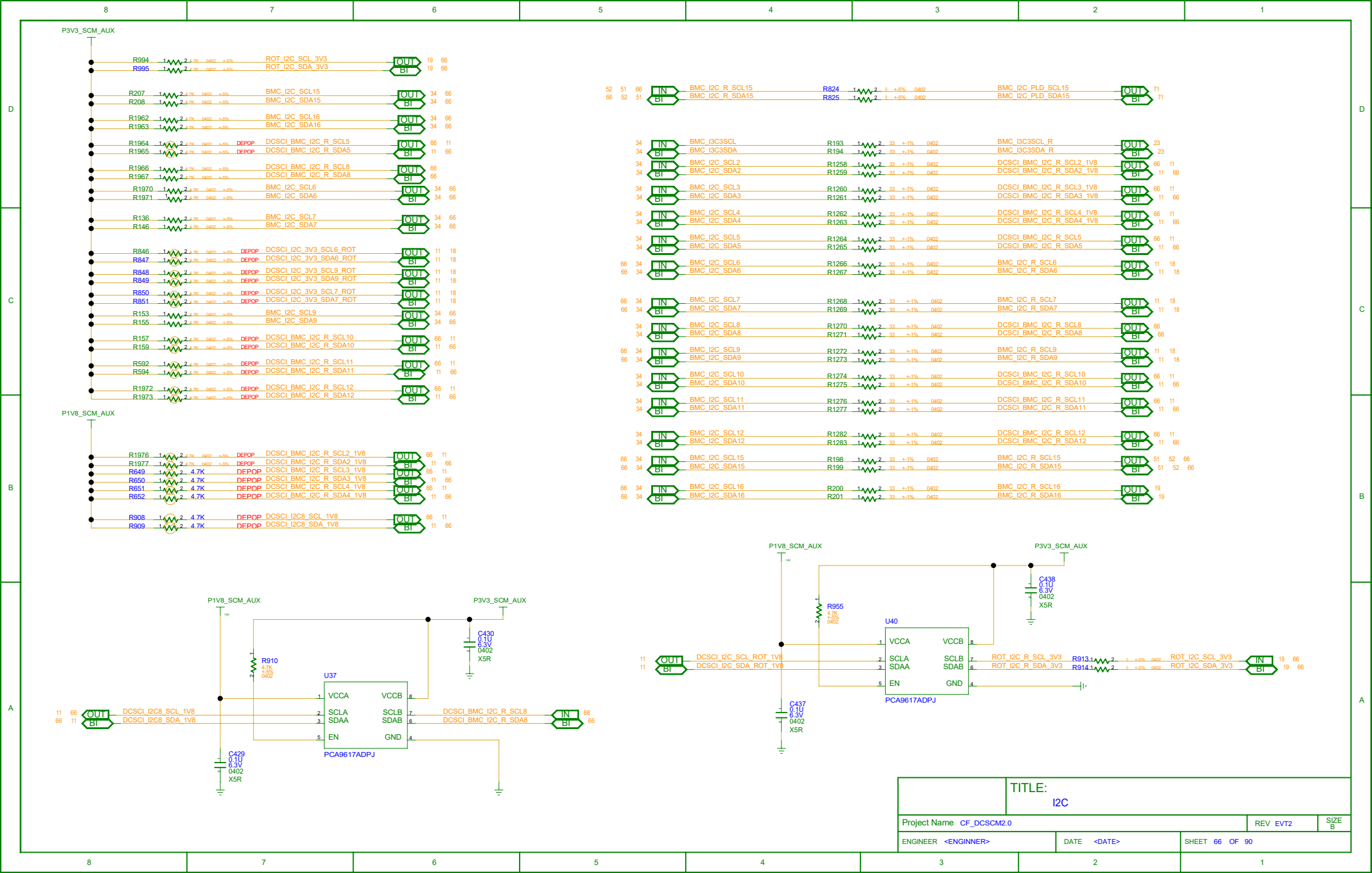
REV EVT2

SIZE B

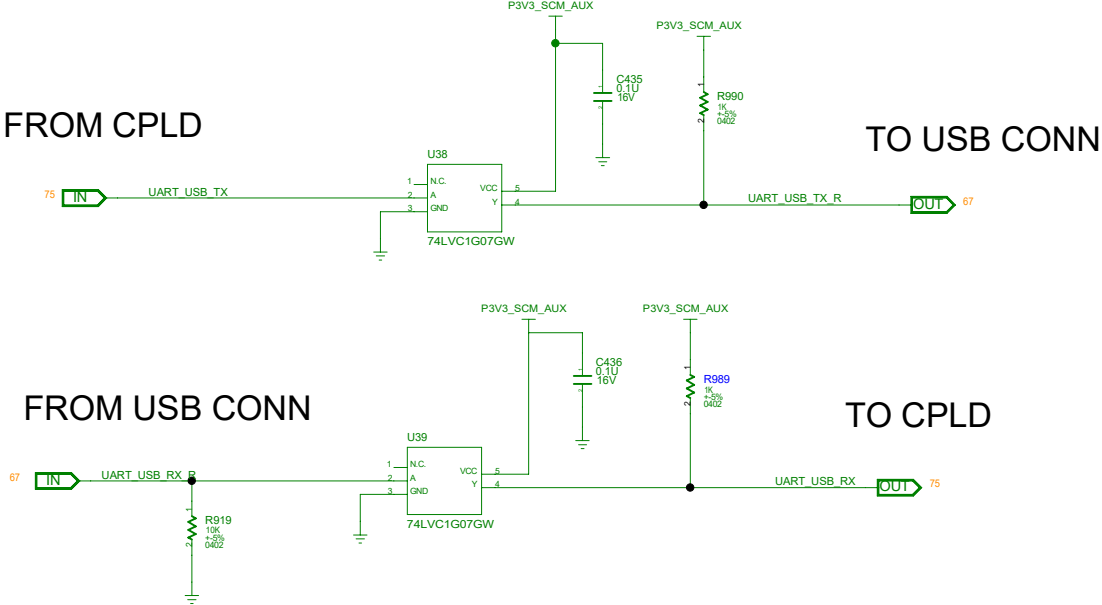
ENGINEER <ENGINEER>

DATE <DATE>

SHEET 65 OF 90

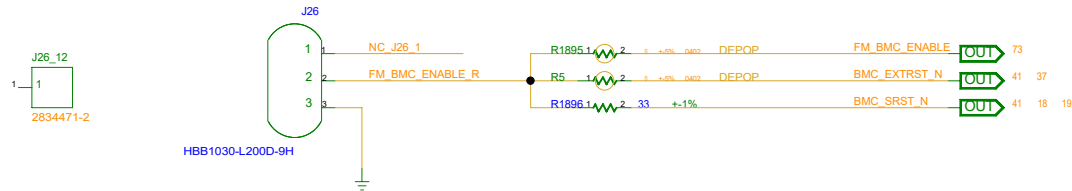
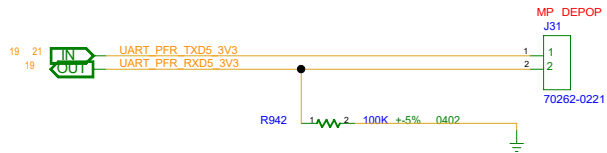
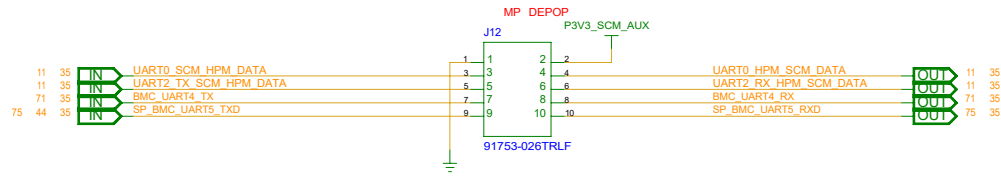


TITLE:		I2C	
Project Name		CF_DCSCM2.0	REV EVT2
ENGINEER		<ENGINEER>	DATE <DATE>
SHEET		66 OF 90	SIZE B



		TITLE:	
		UART_DEBUG_HEADER/CONN(2 of 2)	
Project Name CF_DCSCM2.0			REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 68 OF 90

UART DEBUG HEADER



BMC ENABLE	
1-2	BMC ENABLE(DEFAULT)
2-3	BMC DISABLE - EXTRST (POP R5 DEPOP R1896)
	BMC DISABLE -SRST (DEPOP R5 POP R1896)

WHEN JUMPER IS INSTALLED ON PINS 2 AND 3,
SRST# OR EXTRST# ON BMC IS PULLED LOW AND BMC IN RESET STATES

		TITLE: JUMPER/HEADER(3 OF 3)	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 69 OF 90

8

7

6

5

4

3

2

1

D

D

C

C

B

B

A

A

----CPLD----

		TITLE: ----CPLD----		
Project Name CF_DCSCM2.0				REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 70 OF 90	

8

7

6

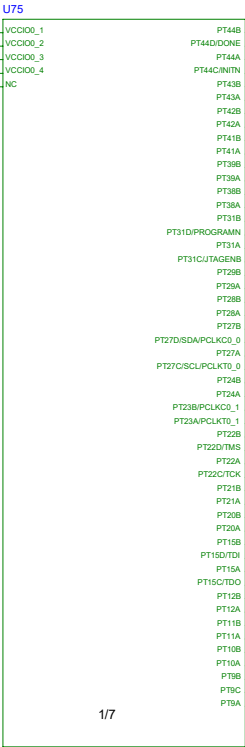
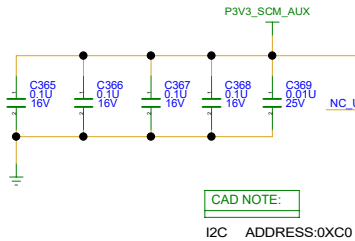
5

4

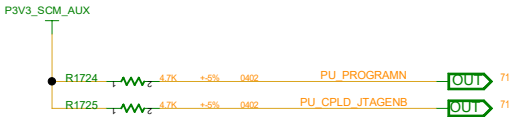
3

2

1



LCMX03D-9400HC-5BG256C



CAD NOTE:

RST_PLTRST_N PULL DOWN ON HPM SIDE

LVDS_DATA_RX_DN
LVDS_DATA_RX_DP

LVDS_CLK_RX_DN
LVDS_CLK_RX_DP

TITLE:

CPLD(1/5)

Project Name CF_DCSCM2.0

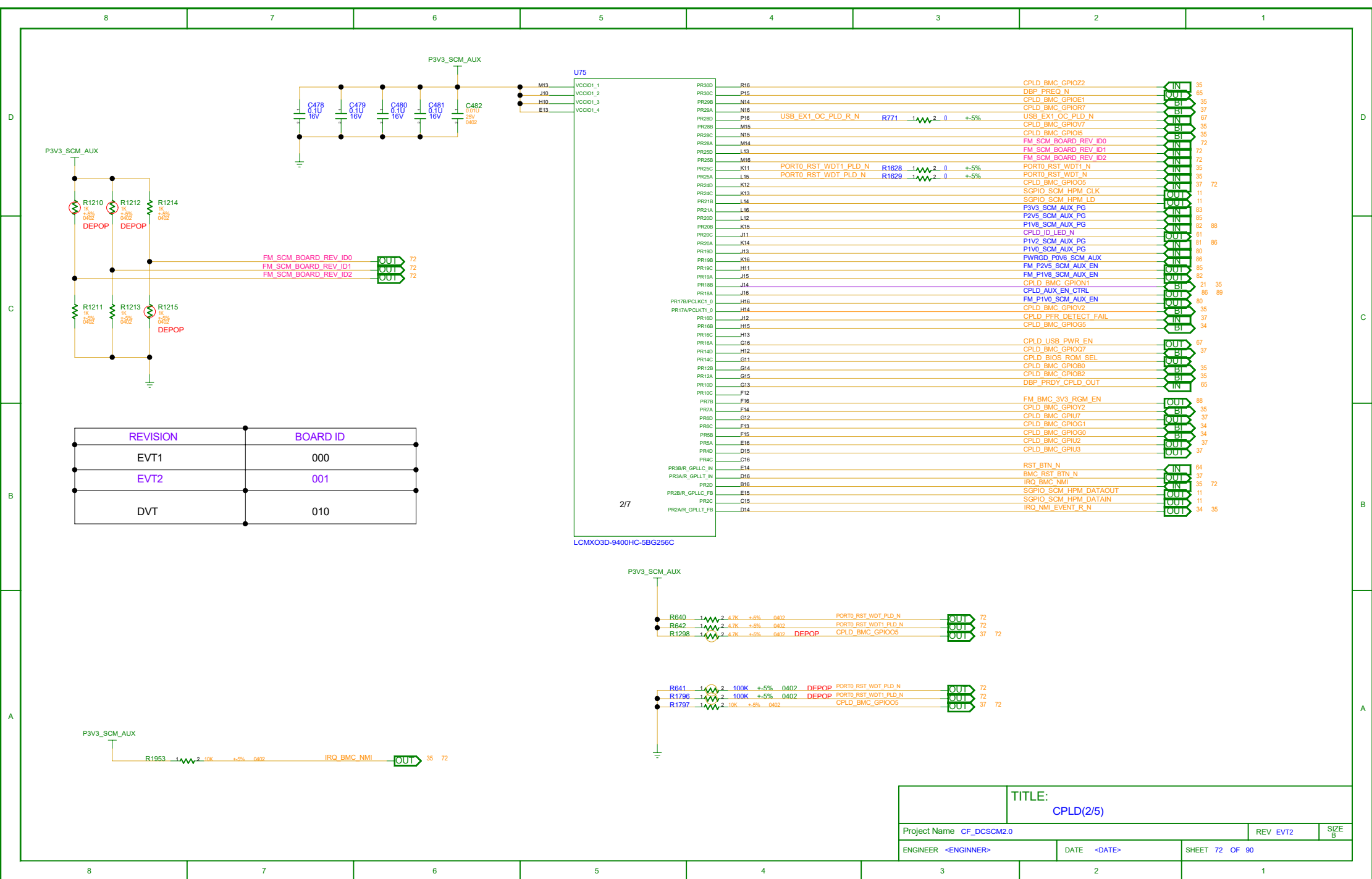
REV EVT2

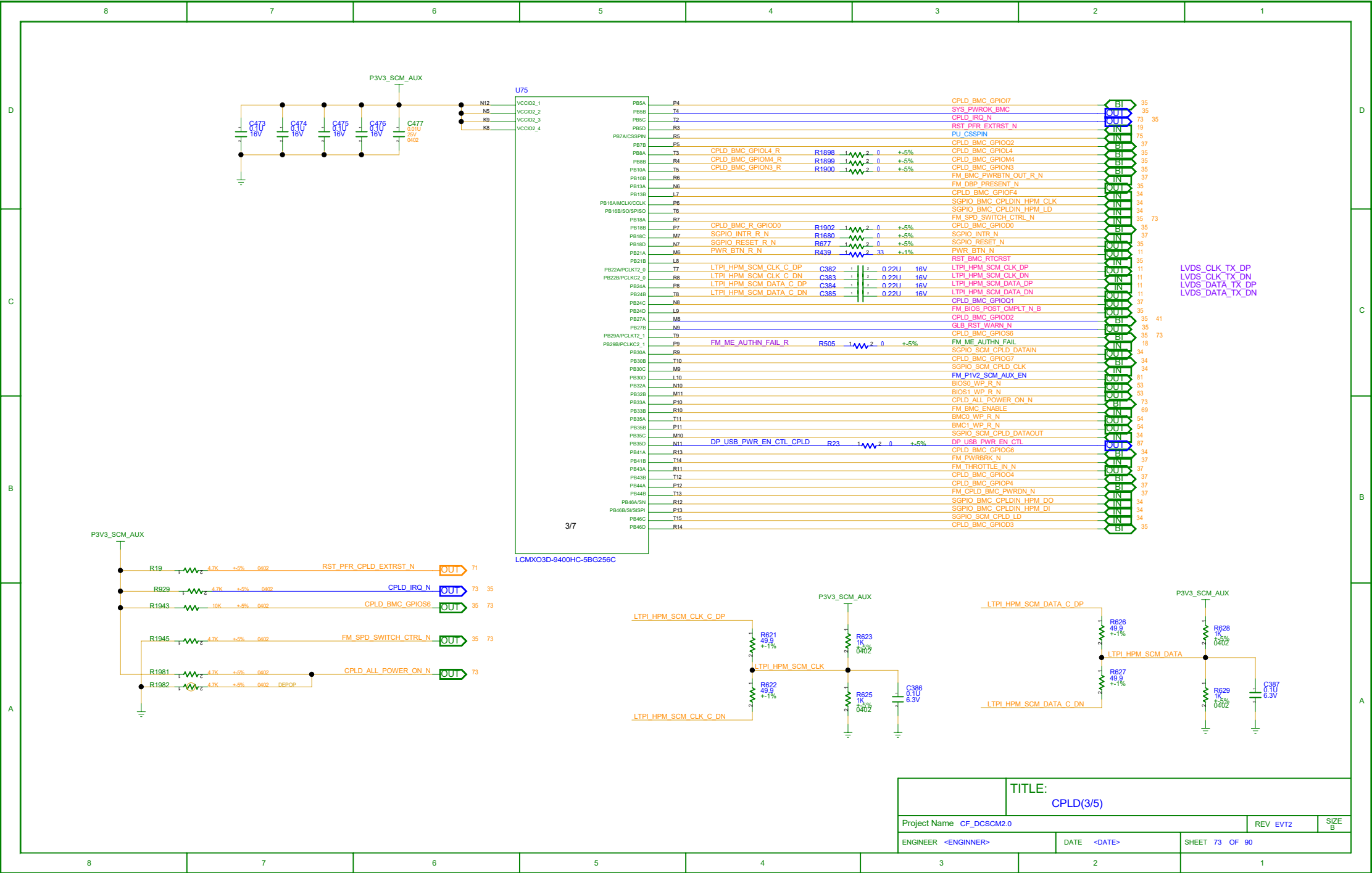
SIZE B

ENGINEER <ENGINEER>

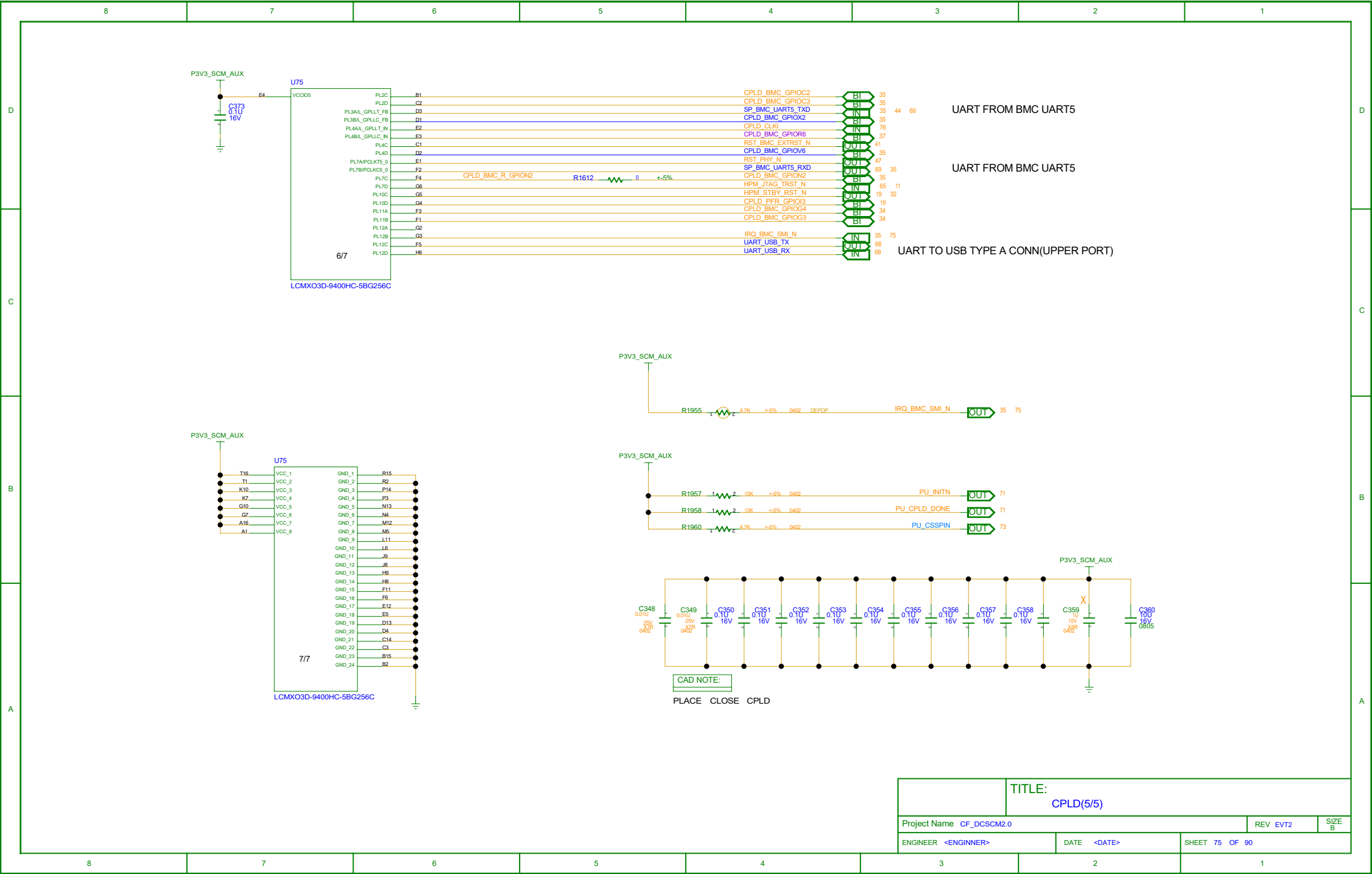
DATE <DATE>

SHEET 71 OF 90



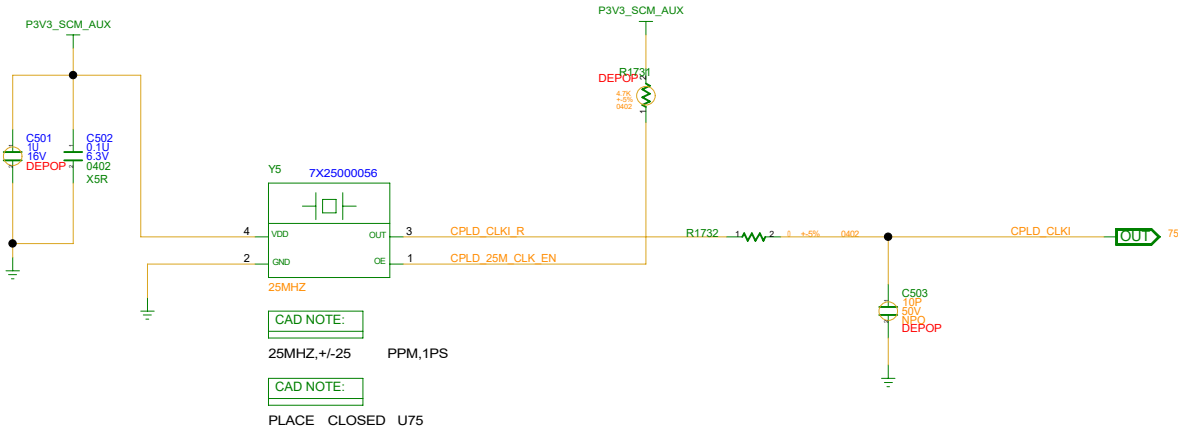




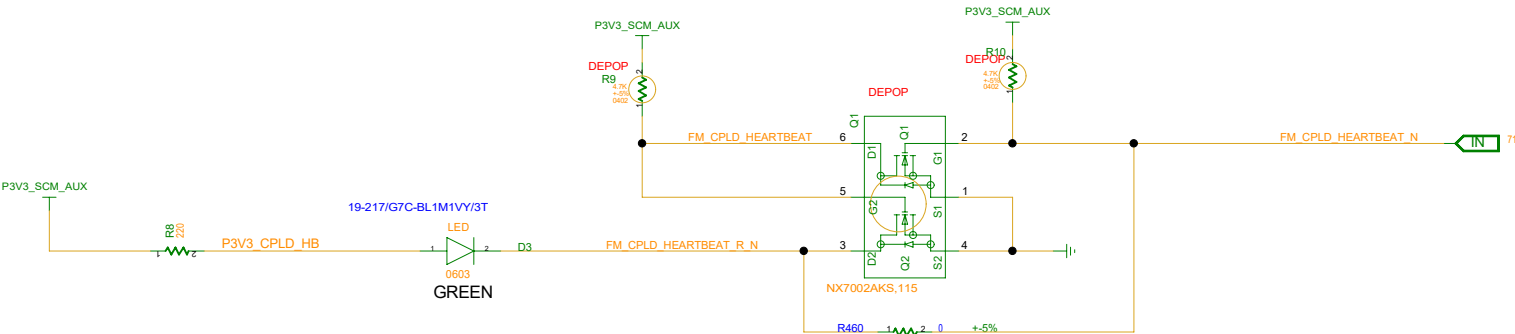


TITLE:		CPLD(5/5)	
Project Name		CF_DCSCM2.0	REV EVT2
ENGINEER		<ENGINEER>	DATE <DATE>
SHEET		75 OF 90	SIZE B

CPLD CLOCK IN



CPLD HEARTBEAT LED

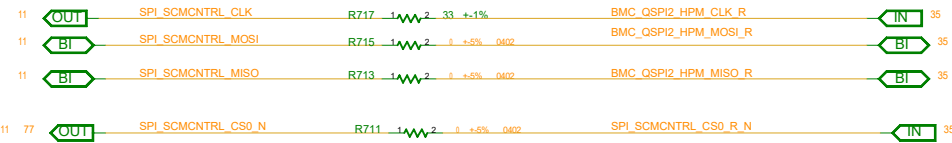


TITLE:		CPLD_CLOCK/HB	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET		76	OF 90

CPLD SPI

TO HPM CPLD

FROM BMC



TITLE:		CPLD_SPI	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 77 OF 90

Project Name		CF_DCSCM2.0		REV	EVT2	SIZE	B
ENGINEER		<ENGINEER>		DATE	<DATE>		SHEET 78 OF 90

8

7

6

5

4

3

2

1

D

D

C

C

B

B

A

A

----POWER----

		TITLE: ----POWER----	
Project Name CF_DCSCM2.0			REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 79 OF 90

8

7

6

5

4

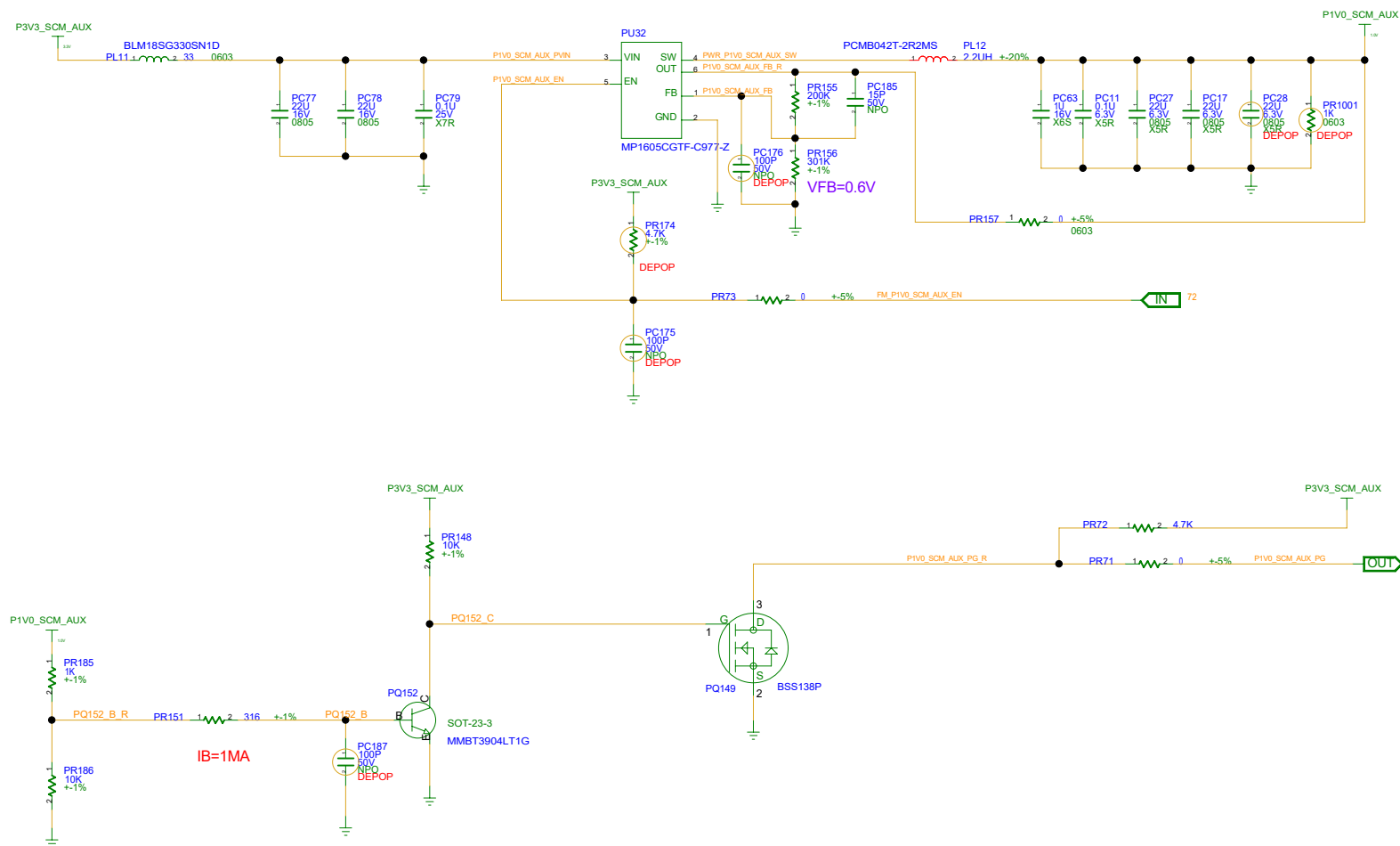
3

2

1

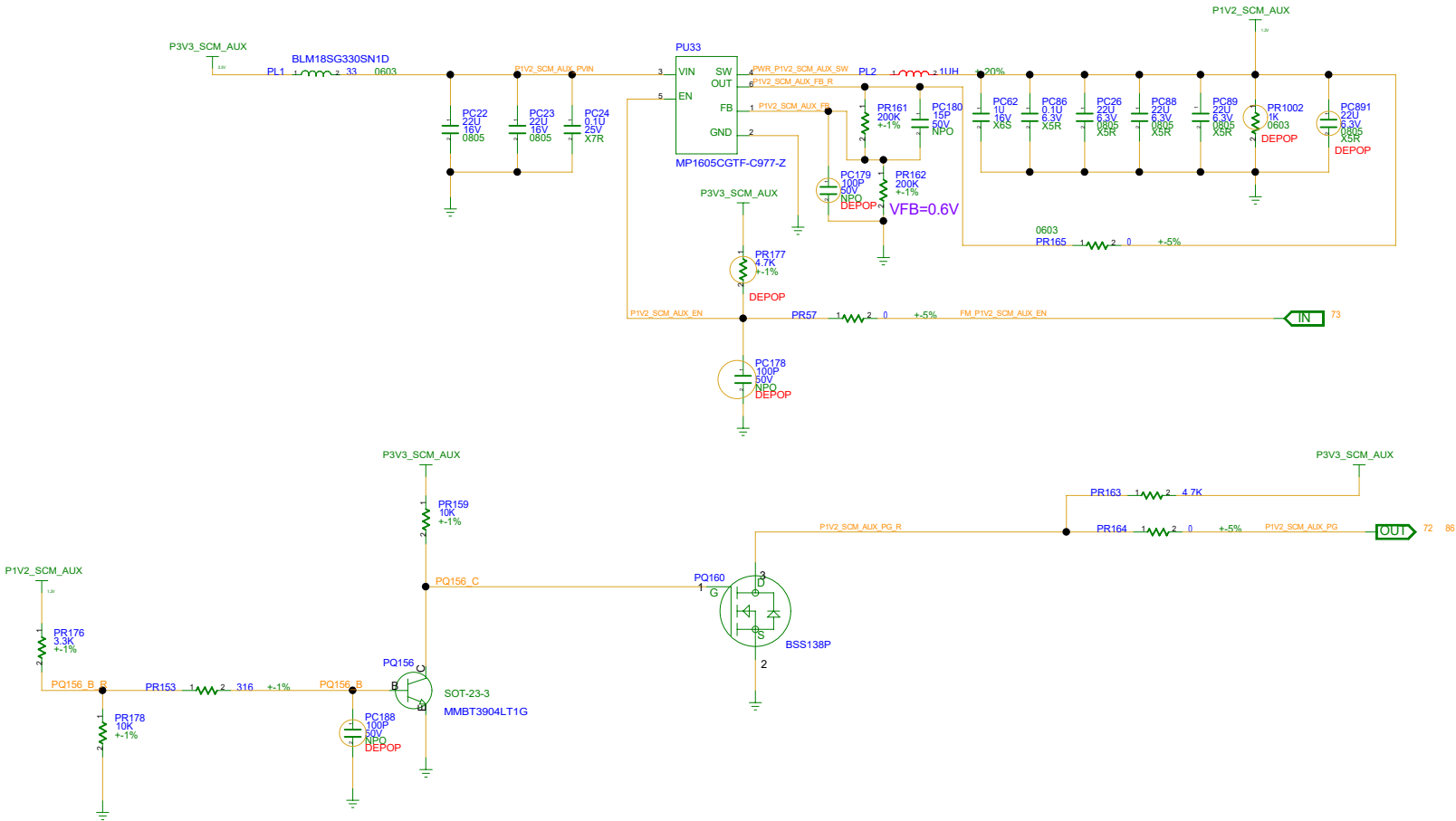
P3V3_SCM_AUX => P1V0_SCM_AUX

NOMINAL VOUT=1.0V
DC TOLERANCE=+/-3%
RIPPLE TOLERANCE=+/- 0.5%
TOTAL TOLERANCE=+/- 4.7%
TDC/IMAX=0.74A/0.74A
IOCP= 2.4A (FIXED)
FREQ=2200KHZ
RISE TIME: 2MS



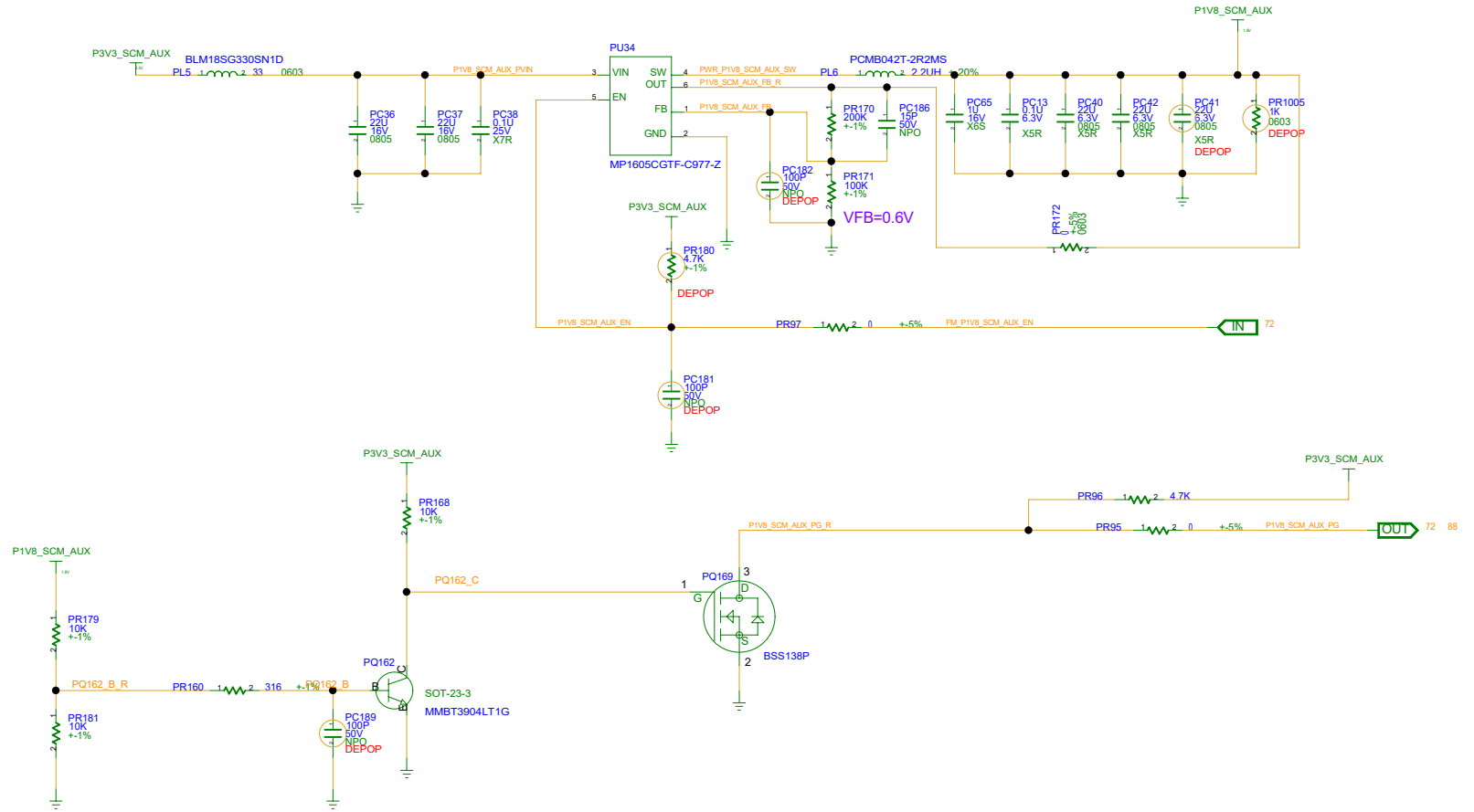
		TITLE: P1V0_SCM_AUX		
Project Name CF_DCSCM2.0				REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 80 OF 90	

P3V3_SCM_AUX => P1V2_SCM_AUX
NOMINAL VOUT=1.2V
DC TOLERANCE=+/-3%
RIPPLE TOLERANCE=+/- 0.5%
TOTAL TOLERANCE=+/- 4.7%
TDC/IMAX=1.68A/1.69A
IOCP= 2.4A (FIXED)
FREQ=2200KHZ
RISE TIME: 2MS



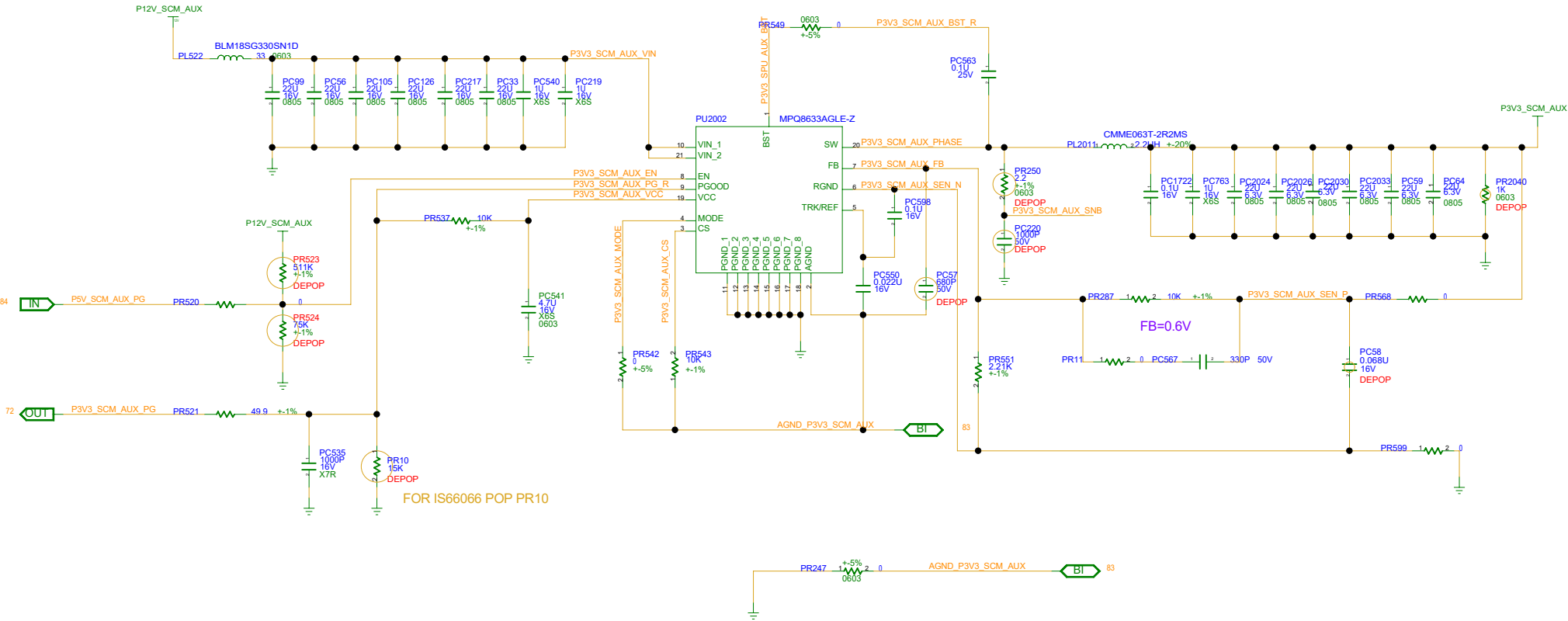
TITLE: P1V2_SCM_AUX		Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>		SHEET 81 OF 90	

P3V3_SCM_AUX => P1V8_SCM_AUX
NOMINAL VOUT=1.8V
DC TOLERANCE=+/-3%
RIPPLE TOLERANCE=+/- 0.5%
TOTAL TOLERANCE=+/- 4.7%
TDC/IMAX=0.37A/0.37A
IOCP= 2.4A (FIXED)
FREQ=2200KHZ
RISE TIME: 2MS



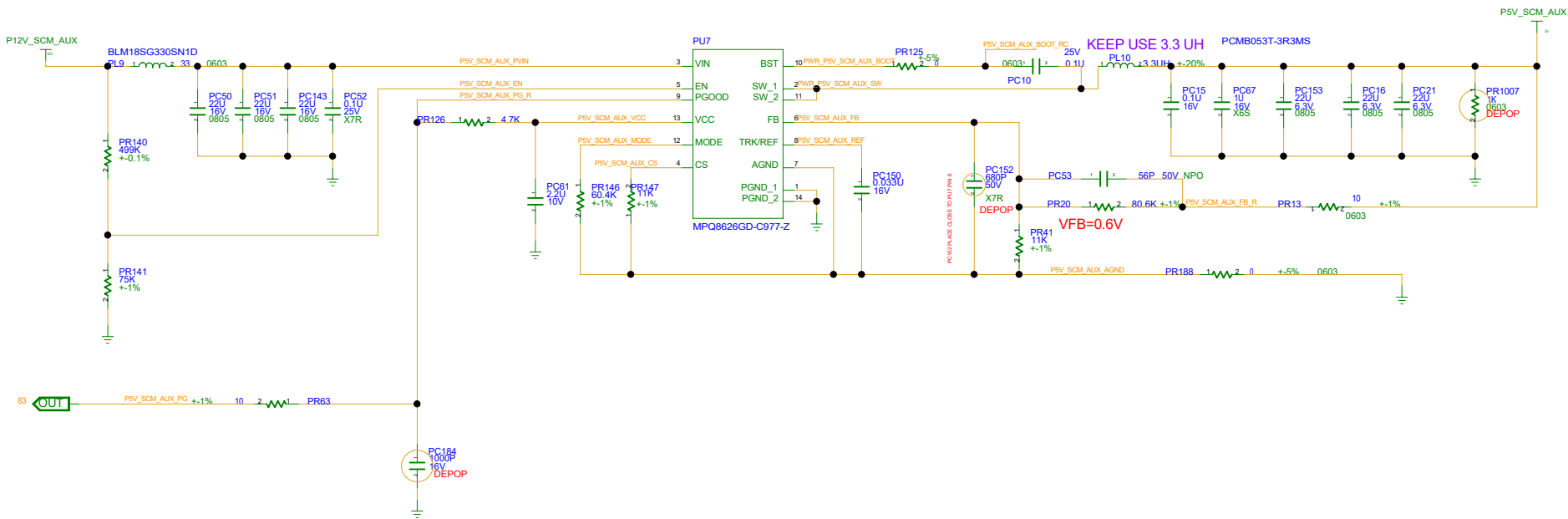
TITLE:		P1V8_SCM_AUX	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET 82 OF 90		SIZE B	

P12V_SCM_AUX=> P3V3_SCM_AUX
NOMINAL VOUT=3.3V
DC TOLERANCE=+/- 1%
RIPPLE TOLERANCE=+/- 1%
TOTAL TOLERANCE=+/- 5%
TDC/IMAX=4.75A/4.76A
IOCP=6.9A
FREQ=600KHZ
RISE TIME: 2MS



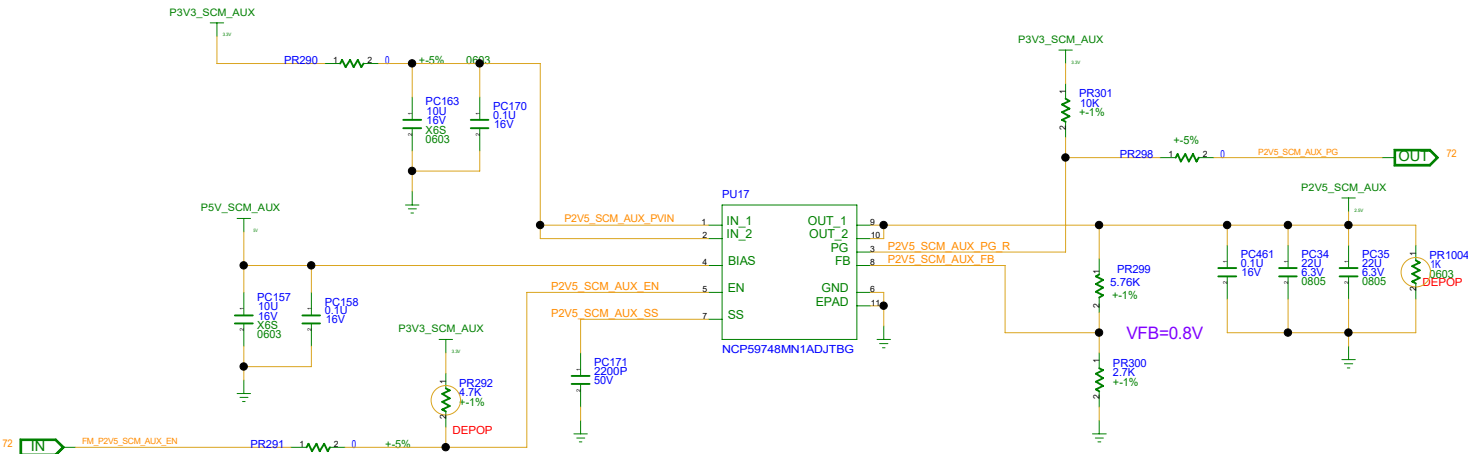
TITLE:			
P3V3_SCM_AUX			
Project Name CF_DCSCM2.0			REV EVT2
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 83 OF 90

P12V_SCM_AUX => P5V_SCM_AUX
NOMINAL VOUT=5.0V
DC TOLERANCE=+/-3%
RIPPLE TOLERANCE=+/- 0.5%
TOTAL TOLERANCE=+/- 4.7%
TDC/IMAX=0.5A/0.5A
IOCP=3.5A
FREQ=600KHZ
RISE TIME: 2MS



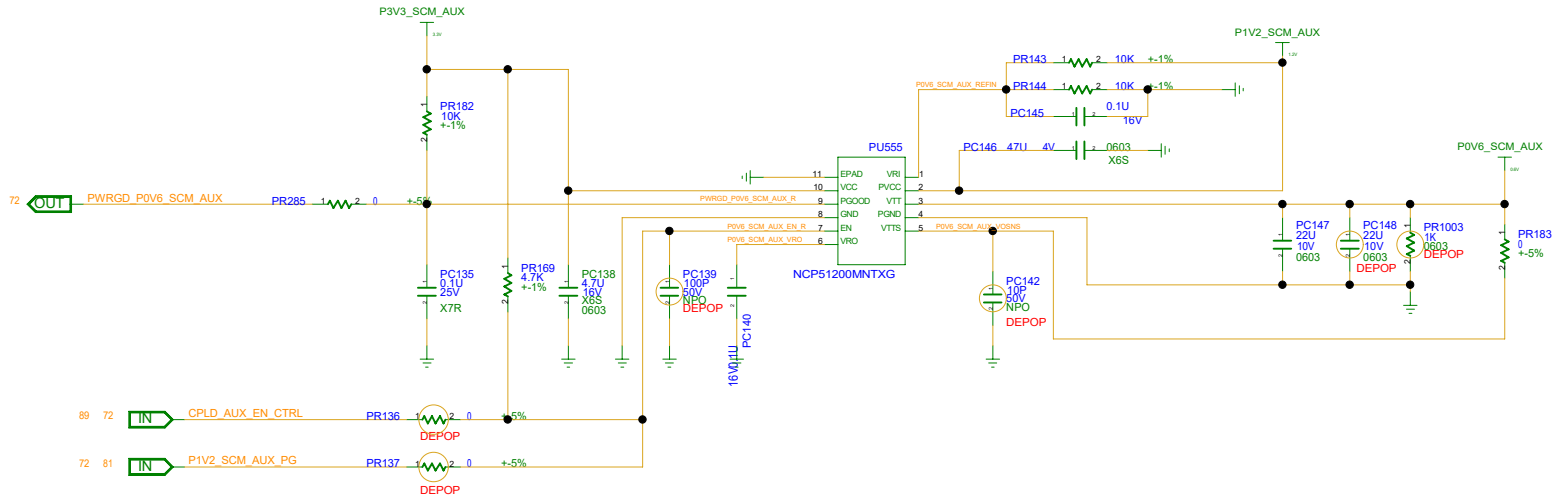
TITLE:		P5V_SCM_AUX	
Project Name		CF_DCSCM2.0	REV EVT2
ENGINEER		<ENGINEER>	DATE <DATE>
SHEET		84 OF 90	SIZE B

P3V3_SCM_AUX => P2V5_SCM_AUX
NOMINAL VOUT=2.5V
DC TOLERANCE=+/-3%
RIPPLE TOLERANCE=+/- 0.5%
TOTAL TOLERANCE=+/- 4.7%
TDC/IMAX=0.1A

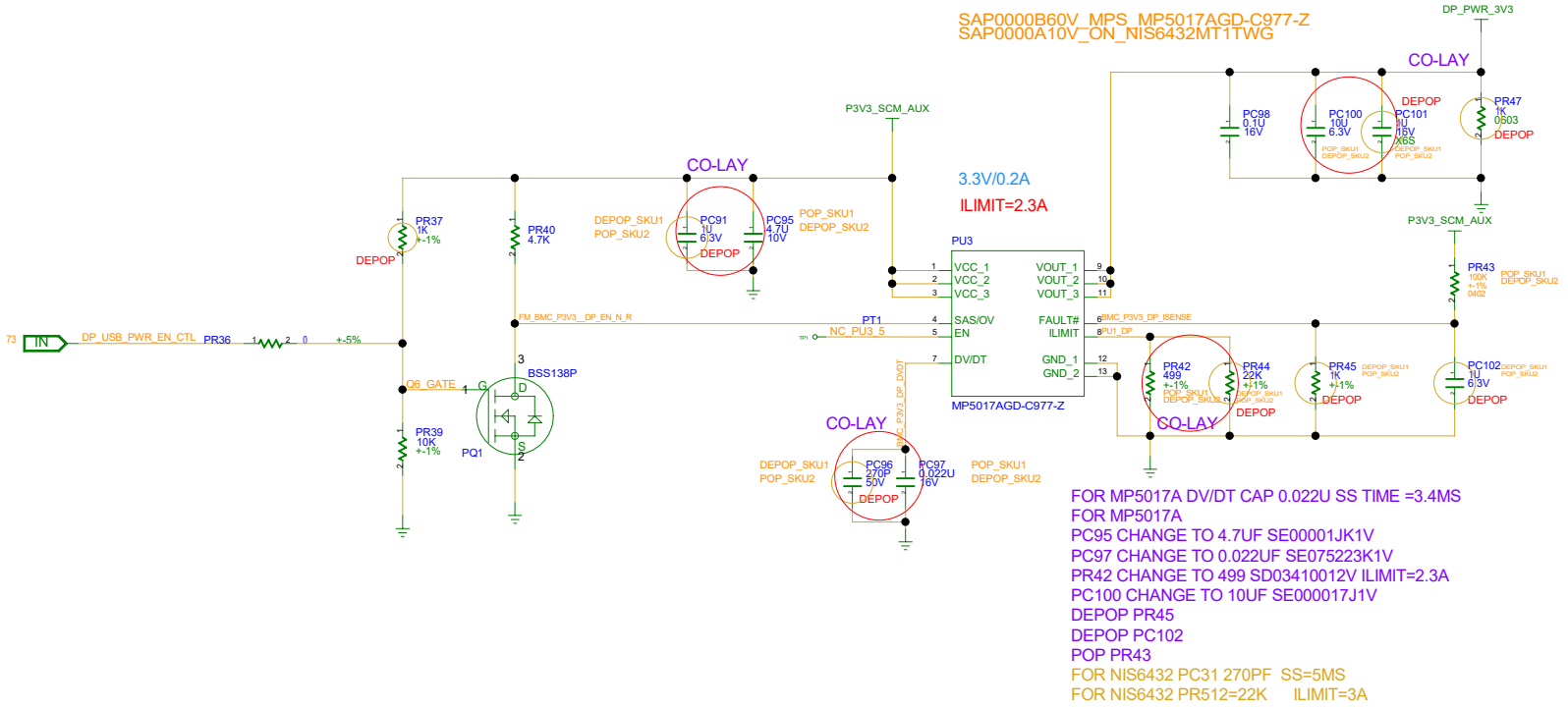


TITLE:		P2V5_SCM_AUX	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 85 OF 90

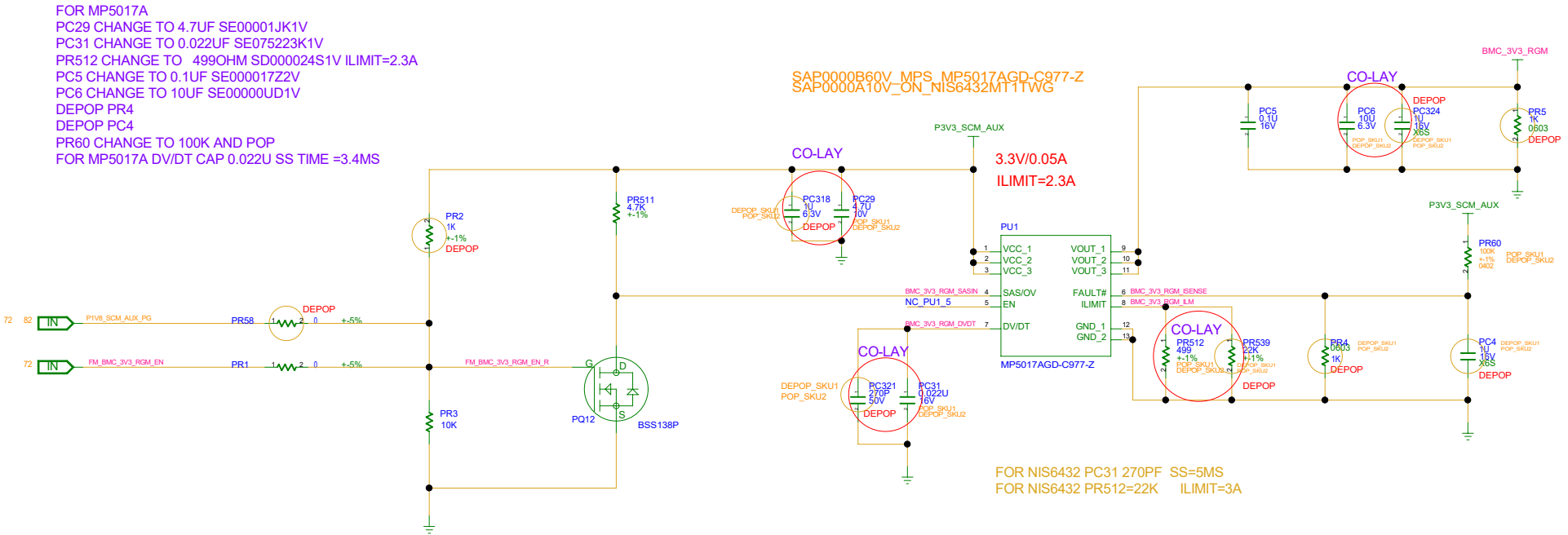
POWER RAIL : P0V6_SCM_AUX
CONTROLLER : NCP51200MNTXG
VOUT=0.6V
IMAX=0.33A
OCP=4.5A



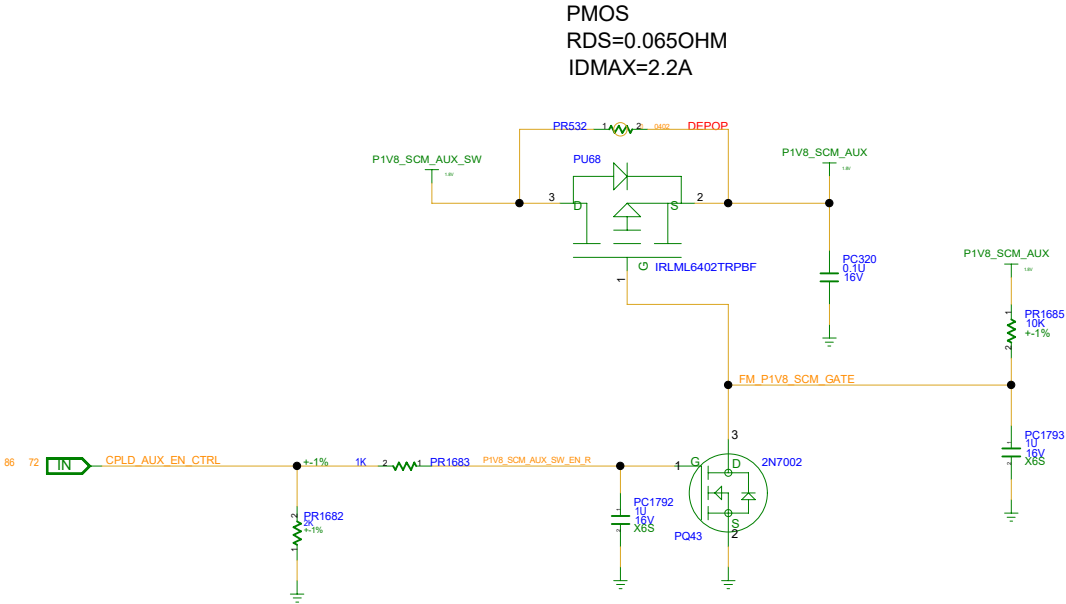
TITLE:		P0V6_SCM_AUX	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET 86 OF 90		SIZE B	



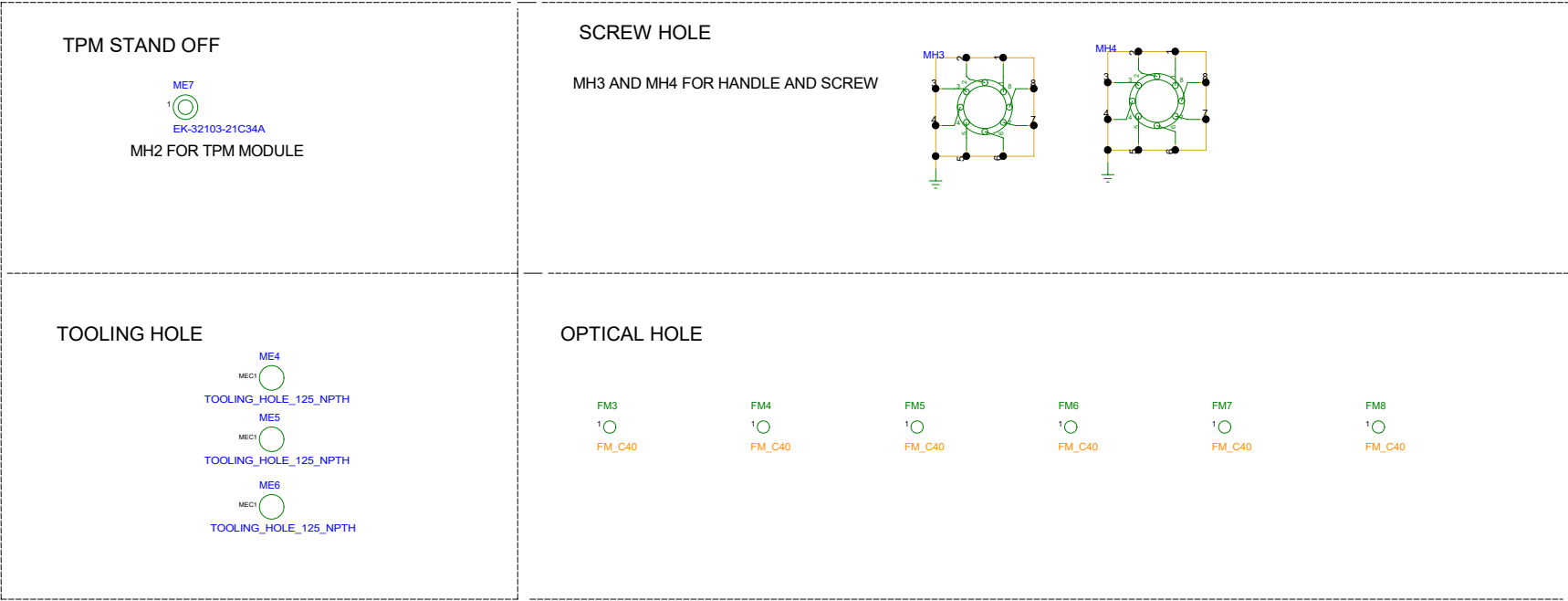
TITLE:		DP_PWR_3V3	
Project Name	CF_DCSCM2.0	REV	EVT2
ENGINEER	<ENGINEER>	DATE	<DATE>
SHEET 87 OF 90		SIZE B	



TITLE:		BMC_P3V3_RGM	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 88 OF 90



TITLE:			P1V8_SCM_AUX_SW	
Project Name CF_DCSCM2.0			REV EVT2	SIZE B
ENGINEER <ENGINEER>		DATE <DATE>	SHEET 89 OF 90	



		TITLE: HOLE	
Project Name CF_DCSCM2.0		REV EVT2	SIZE B
ENGINEER <ENGINNER>	DATE <DATE>	SHEET 90 OF 90	